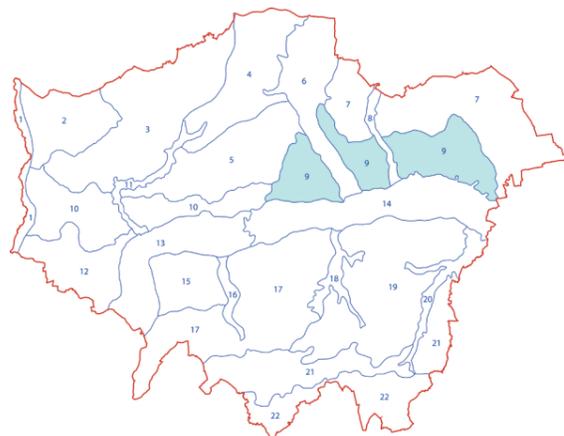
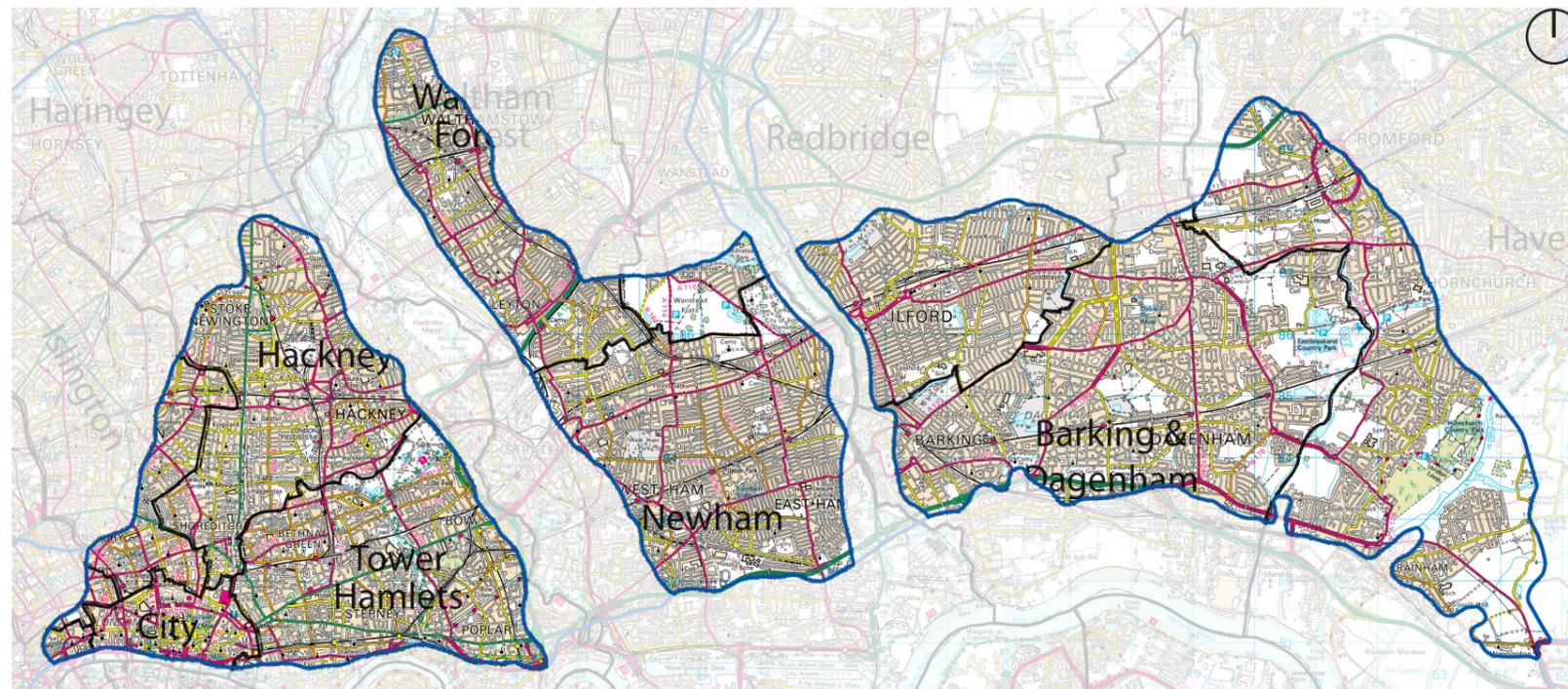


9. North Thames Terraces



Key plan



9. North Thames Terraces

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Description

The North Thames Terraces are divided into three sections by the Rivers Lea and Roding (NLAs 6 and 7). They stretch from the City, in the west, to Rainham in the east where an approximately 6km wide strip of the Taplow and Hackney River Terrace Deposits overlies the London Clay. The North Thames Terraces abut the alluvial deposits of the Thames floodplain (NLA 14) to the south. Overlying the gravels in turn, are some significant deposits of brickearth, (Ilford Silt Member) particularly in the area of Dagenham. The working of these deposits played a crucial role in the appearance of London today, with many of the buildings being constructed from the London stock bricks made from these brickearths.

As is characteristic of gravels, the soils are generally loam, well-drained and easy to work. The topography is gentle, stepping up c.5m from the alluvial floodplain of the Thames, but then rising gradually to the north, reaching, for example, 35m AOD at Stamford Hill. The river valleys which cross it (mainly the Lea and Roding, but also the Fleet and Ingrebourne) are generally shallow, though (as with the former Fleet at Ludgate Circus) noticeable in today's topography.

Gravels adjacent to river valleys have always been particularly

attractive to human settlement and exploitation from at least the Iron Age. The three components of the North Thames Terraces show interesting variations. The western segment, which includes the City of London, is particularly well sited as the River Thames flows close to the gravel terrace edge, making it ideal for the landing of ships. The alluvial floodplain of the Thames (NLA 14) is beginning to narrow and, to the south, a series of gravel island 'outliers' of NLA 17 (South Thames Clays and Gravels) mean that, at least since the Iron Age, this is the lowest point at which it is possible to ford the Thames at the approximate site of London Bridge. For these reasons, the settlement of London first grew up in the area of City, founded initially by the Romans who were also the first to bridge the Thames at this point.

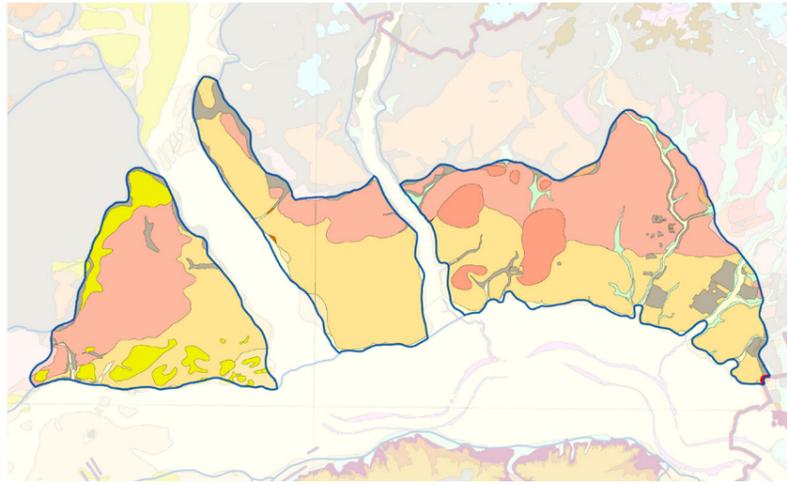
Historically, this area also contained a number of other settlements, mainly related to the road network which fans out from the City. These settlements include Stoke Newington, Hackney, Bow and Stepney, all of which were swallowed up by the expanding city from the 18th century onwards, particularly as the docks moved ever further eastwards.

The other two components of the North Thames Terraces are less well situated in relation to the Thames, which is generally further away

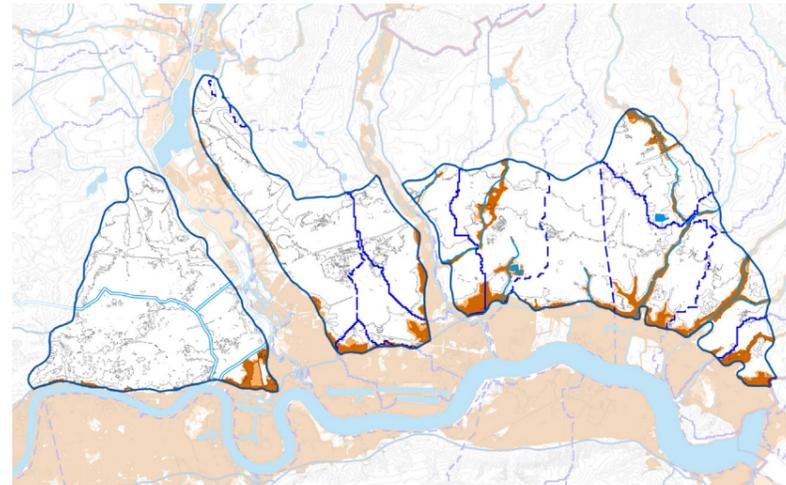
from the edge of the terrace. They too have been intensively used, for agriculture and gravel extraction, but their historic character has been more in support of the city, with a network of settlements, such as Stratford, Ilford and Romford on the main road to East Anglia, and others, like Rainham, sited on the interface of the gravel terrace and the alluvium to exploit both. Initially, these settlements provided food for the capital, and resting places for travellers, but they were gradually absorbed as the centre of new (19th-century) suburbs between the Lea and the Roding, and later development (from the interwar period) to the east. A few areas of open space with relict habitats remain, such as Wanstead Flats (once part of Epping Forest), and at the extreme eastern edge of the Type, some areas of open farmland (protected as Green Belt). The River Ingrebourne forms a corridor of river, reedswamp, meadow and native wood which links this Natural Landscape Area of the Essex Plateau to the north.

Extensive sand and gravel workings at the eastern end (Barkingside to Aveley) have left a legacy of restoration work in many areas of open land that has not been built on. A few of these former quarries have been flooded.

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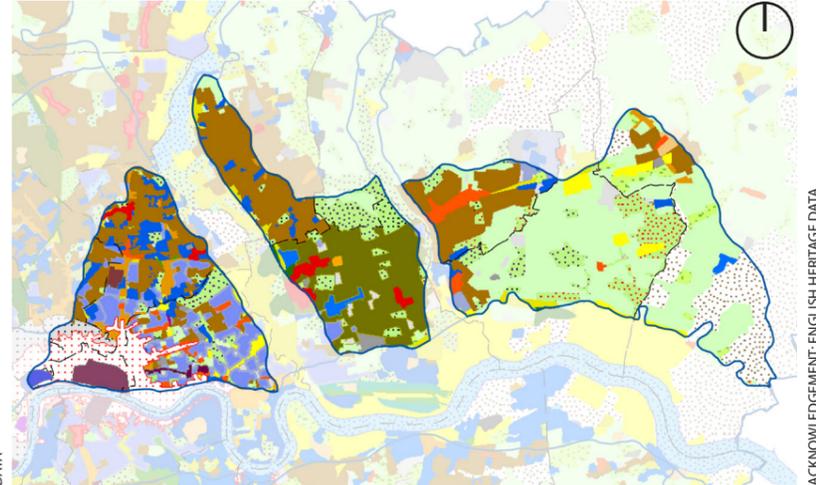


Geology



Rivers and Topography

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Historic Development

ACKNOWLEDGEMENT: ENGLISH HERITAGE DATA

Natural signature and natural landscape features

Natural signature:

North Thames Terraces – Flat, open grassland, stepping up from the Thames, with narrow sinuous strips of woodland marking the alignment of tributary creeks.

The North Thames Terraces step up from the Thames floodplain, then rise gradually, cut by occasional river valleys (the Fleet, Lea, Roding, Ingrebourne, etc.) and characterised by free-draining and easily worked soils. The existence of the brickearth deposits, overlying the gravels, is also significant in that it provided a ready source of building materials.

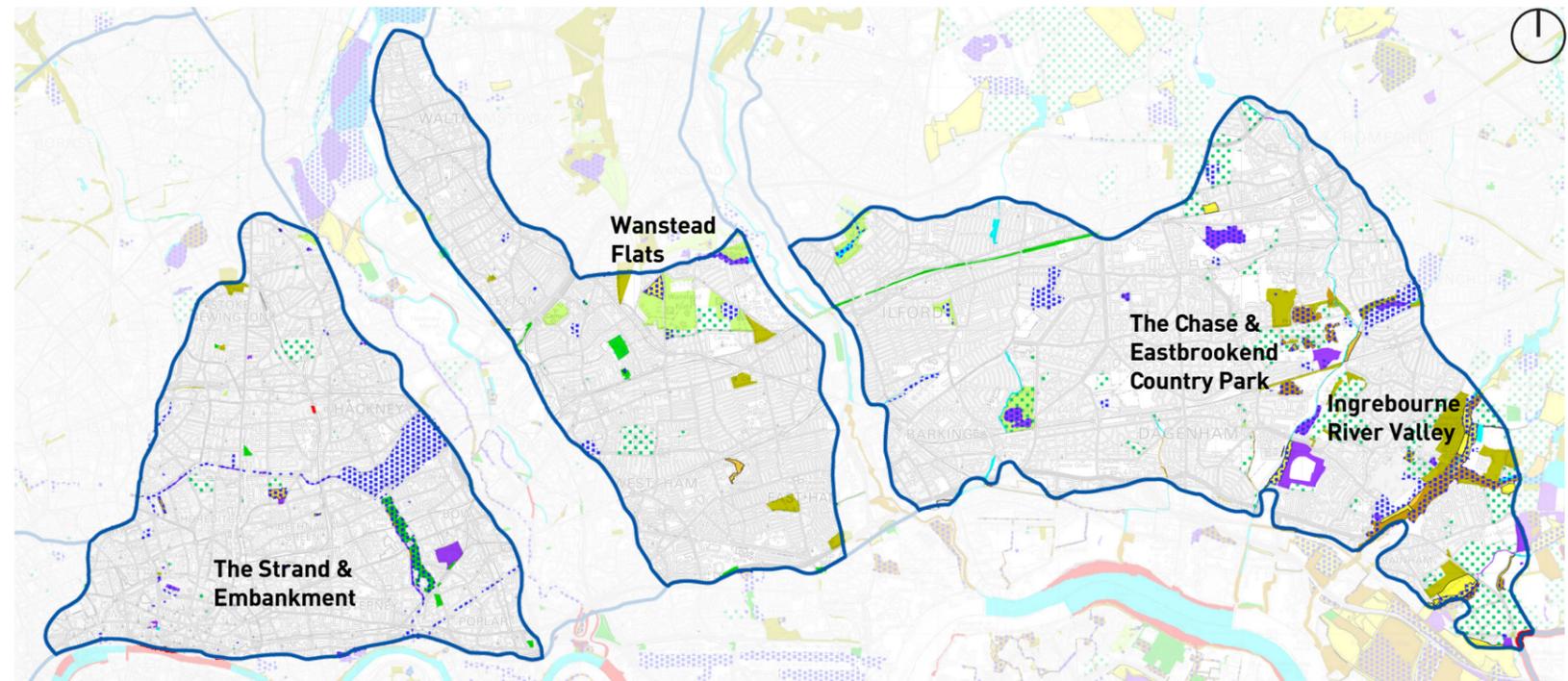
The remnant semi-natural landscapes of this Landscape Area are generally scattered and isolated, often surviving within parks created as part of the suburban expansion of the 19th and 20th centuries.

Although perhaps providing an impression of the gentle topography and easy soils of the gravel terraces, they are not generally typical of historic patterns of land use and vegetation. The open acid grasslands and occasional groups of trees of Wanstead Flats and the Chase provide clues for the natural signature of these broad river terraces, where the open landscapes contrast with the sinuous lines of trees along the river valleys and at wetland scrapes. The surviving agricultural land at the extreme east is a reminder of the agricultural value of this character type, while the lower Ingrebourne valley is a corridor of open space in an otherwise densely built up area.

Within the western (City) component of the North Thames Terraces there are no significant areas of semi-natural landscapes. However, the relationship of the gravel terrace to the river is seen clearly in the often abruptly sloping roads which connect the Strand/Fleet Street to the Victoria Embankment. In terms of enabling an understanding of the topography of the city, they are important.

Examples of natural landscape features within the North Thames Terraces, from east to west, are:

- **Ingrebourne Valley from Rainham to Upminster (including Hornchurch Country Park)** – Between Rainham and Upminster, the Ingrebourne valley remains open countryside, with a network of fields, woods and ponds. The river has been straightened in parts, particularly as it approaches Rainham, but higher up preserves a natural course. It has a strong population of water vole. Hornchurch Country Park, although an important home to many birds, small mammals and lizards, is predominantly species-poor neutral grassland and planted woodland. The site is on the London Loop.
- **The Chase and Eastbrookend Country Park** – A large area of flooded former gravel quarries adjacent to the River Rom, with associated wetlands and drier acid grassland, containing a number of species of rare flora and fauna, and a wide variety of birds and invertebrates. There are also several black poplars, a rare survival in their natural environment.
- **Wanstead Flats** – Although originally part of Epping Forest, the landscape of Wanstead Flats is very different to the other forest areas on the Chingford/Woodford Ridge (see NLA 7, Essex Plateau), showing clearly the difference between these two Natural Landscape Areas. It is a much more open, acid grassland landscape, with grasses, heather and whin, and only the occasional tree. The invertebrate fauna is particularly interesting, and typical of what is found on the Thames gravel terraces.
- **The Strand and Embankment** – Although there is no remnant vegetation in this area, the site of the Anglo-Saxon emporium of Lundenwic, and although the Embankment is a 19th-century creation, the sharp slope between this and the Strand, seen particularly well from the terrace of Somerset House or down Villiers Street (by Charing Cross Station) is highly characteristic of the Landscape Area and a particularly clear illustration of the historic relationship between London and the Thames.



Natural Habitats & Landscape Key Features

Underlining the natural signature of the North Thames Terraces

Key influences

- Open acid grassland (occasional stands of heather).
- Open farmland with hedgerow trees and small copses – some field ponds.
- River Ingrebourne corridor – sinuous stream, with narrow floodplain meadow and strips of native woodland.
- Local bricks as materials for built development.
- Subtle ‘step up’ in landform, from alluvial floodplain of River Thames to terraces to the north.
- Contrast between narrow strips of woodland along tributary creeks and completely open acid grassland.
- Black poplar.
- Flooded gravel quarries.

Design clues - general

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.

- Steps and subtle terraces as a focus for design.
- Isolated clumps and winding lines of trees within a relatively open meadow setting.

Eastern stretch

- Open acid grassland and wildflower meadows.
- Black poplar (local provenance) planted as features within large scale open spaces, associated with wetland scrapes.

Westminster/The City

- The importance of this gravel terrace to the original siting and historical development of London, from Roman times onward, should be stressed and understood by all those involved in planning the future of the core of the Capital.

North Thames Terraces – Key environmental assets

Environmental asset	Relevant borough	Notes
Mayes Brook Park	Barking and Dagenham	Acid grassland and native hedge. Two lakes with wooded islands and intertidal mud.
Beam River; Beam Valley	Barking and Dagenham, Havering	Bordering the two boroughs, running north to south. Large areas of wet marginal vegetation to the southern areas, as well as wet ditches and intertidal mud. The open fields to the east of the river and north of A1112 contain native hedges and small wooded areas, and are also habitat for water vole.
The Chase	Barking and Dagenham	Area of native hedges and series of ponds, giving rise to reedswamp and wet marginal vegetation. Site of former gravel works
Eastbrookend Country Park	Barking and Dagenham	Native woodland.
Parseloes Park	Barking and Dagenham	Park with ornamental lake.
Hornchurch Country Park	Havering	Large country park, largely comprising native wood. The area supports a range of birds and invertebrates.
Ingrebourne River, Ingrebourne Valley	Havering	A significant river corridor, being one of London's most natural. In this large open area to the north of Rainham, there are reedswamp, wet ditches, and areas of native wood such as Abbey Wood and Garpin Farm.
South Park	Redbridge	Mature park and acid grassland with large lake.
Loxford Water	Barking and Dagenham, Redbridge	Recreation ground with still water lake.
Wantz Lake and Crowlands Heath Golf Course	Barking and Dagenham	Ancient hedge surrounding golf course. Lake with intertidal mud.
Romford Line Railsides	Barking and Dagenham, Redbridge	Section of important green corridor leading into countryside. Herb-rich grassland.

Environmental asset	Relevant borough	Notes
Wanstead Flats	Waltham Forest	Mix of acid grassland, native wood and hedges, and ditches. Large pond.
Forest Lane Park	Newham	Small landscaped park with herb-rich grassland and small pond.
Priory Park	Newham	Small park with typha.
Central Park	Newham	Large park with native wood.
Abney Park Cemetery (part overlap with area 5)	Hackney	Victorian cemetery with native wood, holding both natural and historical interest.
Hackney Downs	Hackney	Only large open space in this area of London. Native hedges.
Victoria Park	Tower Hamlets	Large park with several still water ponds.
Mile End Park	Tower Hamlets	Park running alongside the Regents Canal. Herb-rich grassland and several ponds.
Hackney Downs	Hackney	Only large open space in this area of London. Native hedges.
St Patrick's Cemetery	Waltham Forest	Mature trees and acid grassland.
Wanstead Flats	Waltham Forest	Mix of acid grassland, native wood and hedges, and ditches. Large pond.
Forest Lane Park	Newham	Small landscaped park with herb-rich grassland and small pond.
West Ham Park	Newham	Large park with native hedges and mature trees.