



Nina ~ St Pauls Primary School, Hammersmith

PART 1: UNDERSTANDING THE RIVER

Introduction

The River performs many functions along the stretch between Kew and Chelsea. The following five main functions are identified in the Strategic Planning Guidance for the River Thames (RPG3B/9B):

- drainage and water supply;
- a setting for development;
- an open space and ecological resource;
- a transport artery; and
- a recreational, leisure and tourist facility.

In addition, it is a rich historical resource and provides the setting for many fine buildings and landscapes. One of its greatest assets is the varied character which has been influenced by a combination of factors relating to its physical characteristics, setting and history, notably the tidal nature of the Thames and the changing characteristics of the River and foreshore and the interrelationship between the natural and physical environment, and development and change in the built environment.

The landscape of the River Thames is a product of its underlying physical conditions and a long history of human settlement and use. In developing a strategy and vision for the future, there is a need to understand the River and the key influences which have shaped its character, in particular:

- physical influences including hydrology and drainage;
- historic background and heritage;
- social and cultural factors;
- landscape character.

The key factors which have influenced the varied and distinctive character of the River are summarised below.

Physical Influences

The estuarine and tidal nature of the River has had a major impact on the development of the landscape, both in the way in which it has affected navigation, settlement and trade, farming and cultivation as well as the development of modern infrastructure such as roads, railways and reservoirs. Over the centuries, human intervention along the Thames has almost completely obscured the natural land surface in the study area and most of the former marshes and meadows have been

replaced by development, resulting in a river landscape that is now almost completely man-made.

In Roman times, the Thames was approximately twice its present day width and 4 metres shallower and may only have been tidal as far upstream as Chelsea. Subsequent narrowing of the river channel due to development of the riverbank in combination with the gradual sinking of South East England, has increased the tidal range upstream to Teddington. Since the seventeenth century, the River has been channelled, areas reclaimed and flood walls constructed. In more recent times, the threat of flooding has necessitated the building of flood defences.



Chiswick Eyot with Chiswick Mall behind

The Thames is fed by a number of tributaries between Kew and Chelsea but the River Wandle and Beverley Brook are the only unculverted rivers. These rivers have a localised impact on the landscape of the River Thames. There are a number of other rivers in the study area such as the Westbourne, Counter's Creek, the Falcon, Parr's Ditch and Stamford Brook, but these are now concealed in conduits and form part of the network of London's lost rivers.

Historic Influences

The Thames has been a focus of human activity since early man reached London about 500,000 years ago. Its connections with royalty, government, commerce and international trade have inspired painters, poets and writers through the ages.

Evidence has been found at low tide along the foreshore of early activity such as hunting, scavenging, fishing and gathering and possible use of the River for water transport. The foreshore also contains abundant evidence of the use of the River and of the technological, economic, social and spiritual development of its inhabitants and users. Foreshore deposits associated with early settlement sites such as Putney, Chelsea and Fulham Villages have been discovered, together with evidence of early industries such as Sanders' Pottery at Mortlake and the osier beds at Duke's Meadow. A canoe from the Mesolithic Period was recovered from the Thames at Kew and proves that the land had been occupied before 4000 BC. Evidence for occupation during the Mesolithic and

Neolithic periods has also been found at Fulham. Because of its situation on higher land, and consequent freedom from flooding, Putney was an ideal location for human settlement and archaeological remains from the Neolithic Period and Iron Age have been discovered. Evidence of Stone Age settlements has been discovered in Brentford and remains from the Iron Age have been found at Battersea.

The origins of London as a major settlement derive from the Roman invasion and the establishment of a river crossing and trading port. Whilst Roman influence in the study area appears to have been limited to roads west and south, there is evidence that the Romans had a settlement at Putney from 1st to 4th centuries AD and speculation that there may have been a wooden bridge crossing. Roman remains have also been found at Fulham Palace.



Unloading coal from barges at the drawdock, Chiswick Mall (about 1905)

Saxon village development was common along the River following the decline of the Roman Empire, for example at Brentford. Fulham has been occupied from the late 5th century, an early Saxon settlement has been discovered on the site of Maubie Gardens and Fulham Parish was established in the 9th Century. The Norman Conquest spurred a new phase of development and trade along the River. Farming settlements bore names that survive today such as Putelei (Putney Fishery) and Mortelage (Mortlake Mill). Fish were netted in the Thames and its tributaries and water mills ground corn from locally farmed fields. Chiswick and Strand on the Green were early fishing villages. Putney Ferry was an important crossing point to Fulham and Westminster.

The development of navigation on the Thames was influenced by the decision of Richard I to sell river rights to the City of London, to fund his crusades abroad. These rights were exercised along the River up to Staines by the City of London until the 19th century when the Great Western Railway was constructed.

The shift westwards of the central city and rural expansion of religious institutions (for example in Chelsea) from the 12th to the 15th centuries gave new impetus to riverside village settlements and agriculture and river trade activities. In the early to post medieval times, the growth of merchant town houses and aristocratic residences reflects the growth in wealth and prosperity. Archaeological evidence of early settlements and medieval expansion are today mostly hidden beneath many layers of urban development.

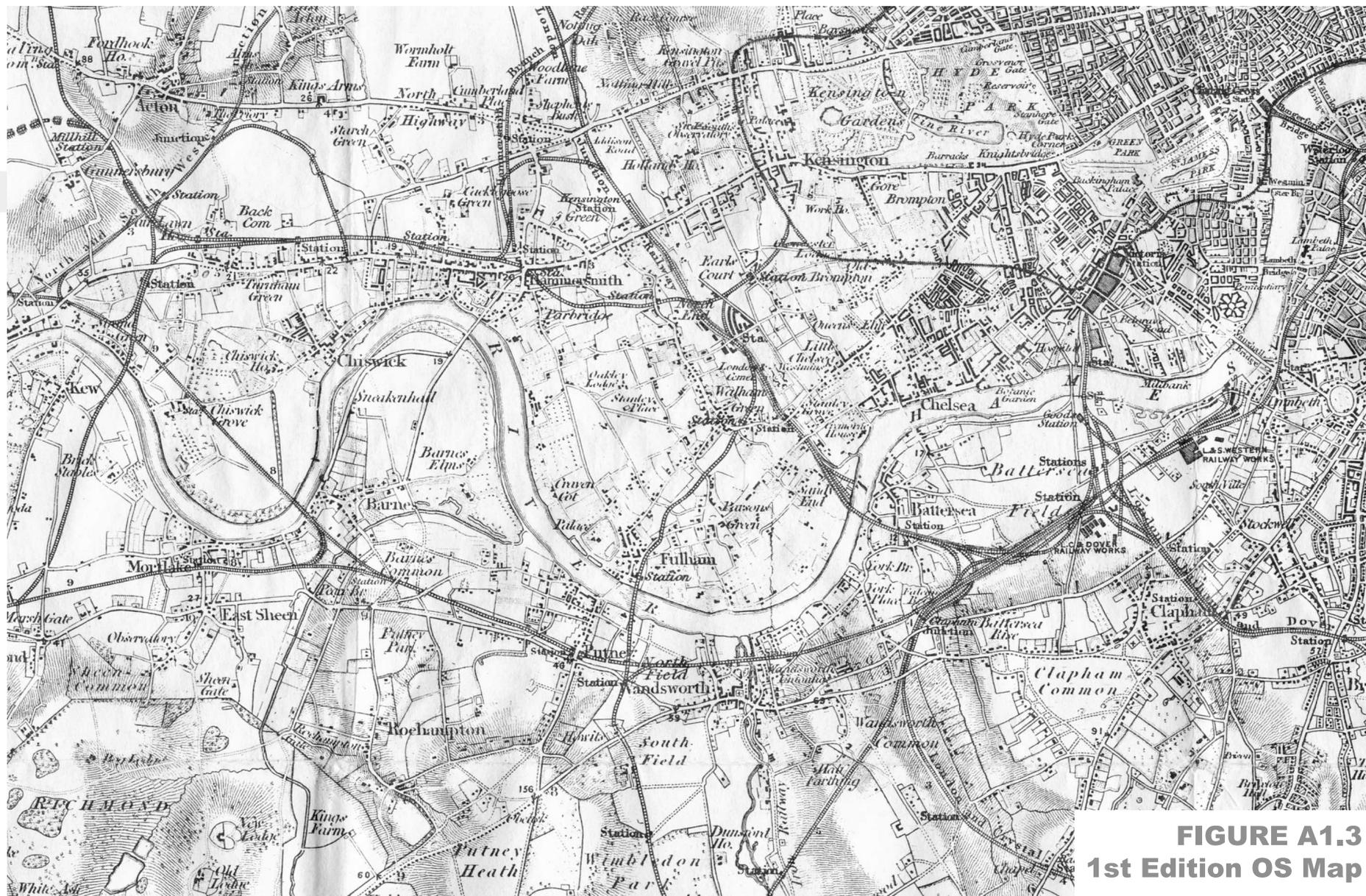


FIGURE A1.3
1st Edition OS Map

In the 16th century, London's inhabitants more than doubled to 200,000 and this necessitated building outwards from the city. As population and prosperity expanded, so did Royal wealth and the expansion of Royal developments along the River. This established a pattern for great houses in estate settings along the River, such as Fulham Palace and The Royal Hospital complex in Chelsea. The Plague and the Great Fire of London led to merchants and aristocrats moving out of the city.

The Thames formed a major barrier to road transport, with London Bridge being the only crossing point. A Bill for a second bridge at Putney was defeated in 1671. A wooden bridge was eventually constructed at Putney in 1729. An increase in engineering expertise led to an intensive period of bridge building and opened the south bank to development.

During the 18th century it became fashionable for London merchants and members of the Court to acquire a country retreat in convenient riverside locations such as Chiswick and Hammersmith. Ranelagh Gardens opened in 1742 and staged the earliest regatta on the Thames in 1775. The trend of stylish town houses terraced along the river frontage became established, notably along Cheyne Walk in Chelsea and in areas such as Strand on the Green and Barnes. Wooden bridges were built at Kew and Battersea in 1771 with a second stone bridge at Kew in 1783. This period saw the expansion of development in the study area, including industrial activity on the fringes of the established built up areas including the dressing and tanning of leather on the banks of the

River Wandle and breweries and flour mills at Chiswick and Hammersmith.

The population increase and the industrial revolution of the 19th century brought about dramatic changes to the river. At the beginning of the period, the riverside between Kew and Chelsea was characterized by isolated villages in market gardens and meadows. The development of Fulham and Sands End illustrates the rapid urban growth which took place at this time. The expansion of the railway transformed the area and improvements in overland transport led to an intensive period of further bridge building. This period also saw the planned development of the Chelsea, Victoria and Albert Embankments with their distinctive plane trees, lamp posts and cast iron benches. Docks such as Brentford, Grosvenor and Chelsea were constructed for cargo handling for riverside industries and land between Battersea and Wandsworth was developed for wharves used in connection with public utilities and bulk cargoes



Chiswick Mall c.1834 drawn by Havell

such as flour and coal. After the Great Western Railway was built in 1845 the role of the river for cargo began to decline, the revenues from toll began to diminish and the navigation fell into disrepair. The recreational role of the Thames developed with the creation of ornamental riverside parks such as Battersea in 1853 and Kew Gardens which has been accessible to the public since 1841. Battersea Park was followed by additional public parks at Bishops Park and Wandsworth Park and the layout of these Victorian parks still survives. The 19th century also saw the construction of the large reservoirs at Barn Elms and Lonsdale Road and waterworks at Brentford, Hammersmith and Chelsea. In 1908 the Port of London Authority was formed and control of the tidal river was passed to them.

The consolidation of residential and industrial development continued in the Edwardian era. Construction of the Great West Road cut through riverside Hammersmith in the 1920s and the Great



Lots Road Power Station

Chertsey Road introduced another major road through the area and involved the construction of Chiswick Bridge. War damage resulted in the opportunity to create new parks such as Furnival Gardens.

Following the Second World War, changes in industry, energy production and transportation resulted in the closure of many factories and established wharves by the mid 1970s. This has led to the redevelopment of former industrial sites for housing, offices and more recently, mixed use development, such as the proposals for Battersea and Lots Road Power Stations.

Residential development has changed the character of the study area in the post war period. A number of high density public housing developments (with increasing height but generally away from the riverside) have impacted on the area. In the 1980s -1990s there has been an increasing tendency towards higher density private residential developments on the riverside.



Strand on the Green

Landscape Character

This stretch of the river has a rich and varied landscape, transitional from arcadian Kew, through suburban areas, to a built up, city landscape. It is characterised by historic strands and malls that developed on the outside bends of the river, for example Strand on the Green, Mortlake, Barnes, Chiswick, Hammersmith and Putney. The main reason for buildings appearing on the outside bends of the river was because the gravel strata deposited by the river in these locations provided suitable foundations. The gravel also provides a better landing place for boats than the silt found on the inside of bends.

Interestingly, the areas across the rivers from these historic settlements tend to be predominantly open green space. This may have increased their attraction for their later settlement by the artistic and the richer merchant classes. At Duke's Meadow, this green space is severely fragmented, in part due to its wide range of uses, from allotment to golf course, typical of the urban fringe. At the



Foreshore at Duke's Meadow



Battersea Riverside

Barnes loop, the green space is less varied (most of it until recently being reservoir sites) though this changes beyond Barnes Common, up the Beverley Brook vale to Roehampton, becoming increasingly a patchwork landscape with playing fields, allotments, parks and a golf course.

A new type of urban riverfront has emerged in the last two decades on former industrial sites and wharves; for example Fulham Reach and Corney Reach. These are predominantly a modern approach of building form with clusters of buildings facing a Thames path. The buildings are stepped back and arranged to maximise views of the river. There is a clear distinction between public and private space. Many of these developments are gated.

Downstream from Putney, the river character changes to a more urban scene. The industrial vales of the Wandle and Counter's Creek impose a new character on the river, and it becomes canalised with vertical walls, bringing taller buildings up to the water edge, their reflections adding to their visual bulk. The industrial areas use

the river (or have done historically). Newer development has encroached on former wharf and warehouse land at Wandsworth, again creating tall, high density, residential blocks.

Within the more urban area, many of the open spaces were created in the 18th and 19th centuries. Bishops, Wandsworth and Battersea Parks have a similar Victorian municipal quality. The original design intentions and management for all the green space in the study area may no longer be appropriate, or what is required in the 21st century.

At Battersea the whole riverside in the Nine Elms area has been industrialised and this stretch contains a number of safeguarded wharves. Part of the Nine Elms riverside could potentially be redeveloped in the future, although there will be a continuing requirement to retain the safeguarded wharves for freight related activities. Battersea Power Station dominates this final reach.

Definition of Landscape Character Reaches

London developed as a series of villages, and in order to try to understand the present day landscape of the whole Kew to Chelsea section, it is essential to appreciate the unique character of each of the smaller sections that merged to formulate it. In order to do this, the landscape between Kew and Chelsea has been sub-divided into eight reaches of different character and individuality that will be looked at in greater detail in Part 4 of this document.

The division of the river into its character reaches was undertaken by the amalgamation of areas with a particular nature. It was felt to be important to ensure that each reach included a section of land from both the north and south sides of the river, for whilst the landscape of one side might be very different from that of the other, their contrast adds to the overall character, and historically may have been one of the reasons why the landscape developed as it did and the two banks are visually interrelated. Within some of the character reaches, there are small sections of a different character, and these have been identified as sub-sections.

This division of the River into sections and also the chosen boundaries between sections are artificial - the River is, of course, one and the sections merge into each other - but it provides a useful study tool.

Character Appraisal Inventory

The following factors have been taken into account in the character appraisal and definition of character reaches:

Visual analysis

- Strategic and local views
- Designed vistas
- Landmarks
- Skylines
- Gateways and thresholds
- Barriers and edges
- Gaps and enclosure

Buildings

- Built form, massing and layout
- Façades
- Height, scale
- Relationships to adjoining uses
- Bridges

Landscape and Vegetation

- Green chains and corridors
- Woodland
- Parkland
- Tree groups (species, height, age and condition)
- Avenues and designed features
- Sports and playing fields
- Private gardens
- Allotments and cemeteries
- Marginal and wetland vegetation.

The Channel Edge

- Natural banks
- Sloping banks
- Vertical banks
- Wharves
- Designed Embankments

River Structures

- Bridges
- Piers
- Slipways and hards
- Jetties, moorings and boats
- Wharves

- Drawdocks and inlets

Public Realm

- Paths and walkways
- Promenades
- Squares
- Parks
- Street furniture, lighting and signage

Movement

- Use of River for transport
- Public transport linkages
- Pedestrian linkages
- Piers and transport infrastructure

Cultural and Historical Associations

- Celebrated residents and visitors
- Archaeological sites
- Industrial heritage
- Place names

The eight character reaches (and their relationship to the character reaches defined in the Thames Landscape Strategy: Hampton to Kew) are illustrated in Figure 1.1 and may be summarised as follows:

1. Kew and Strand on the Green
2. Mortlake, Barnes and Duke's Meadow
3. Chiswick, Hammersmith and North Barnes
4. Fulham Reach and Barn Elms
5. Putney and Fulham Palace
6. Wandsworth and Sands End
7. Chelsea and Battersea
8. Nine Elms

Aerial view of Character Reach No.1 Kew and Strand on the Green



Aerial view of Character Reach No.8 Nine Elms

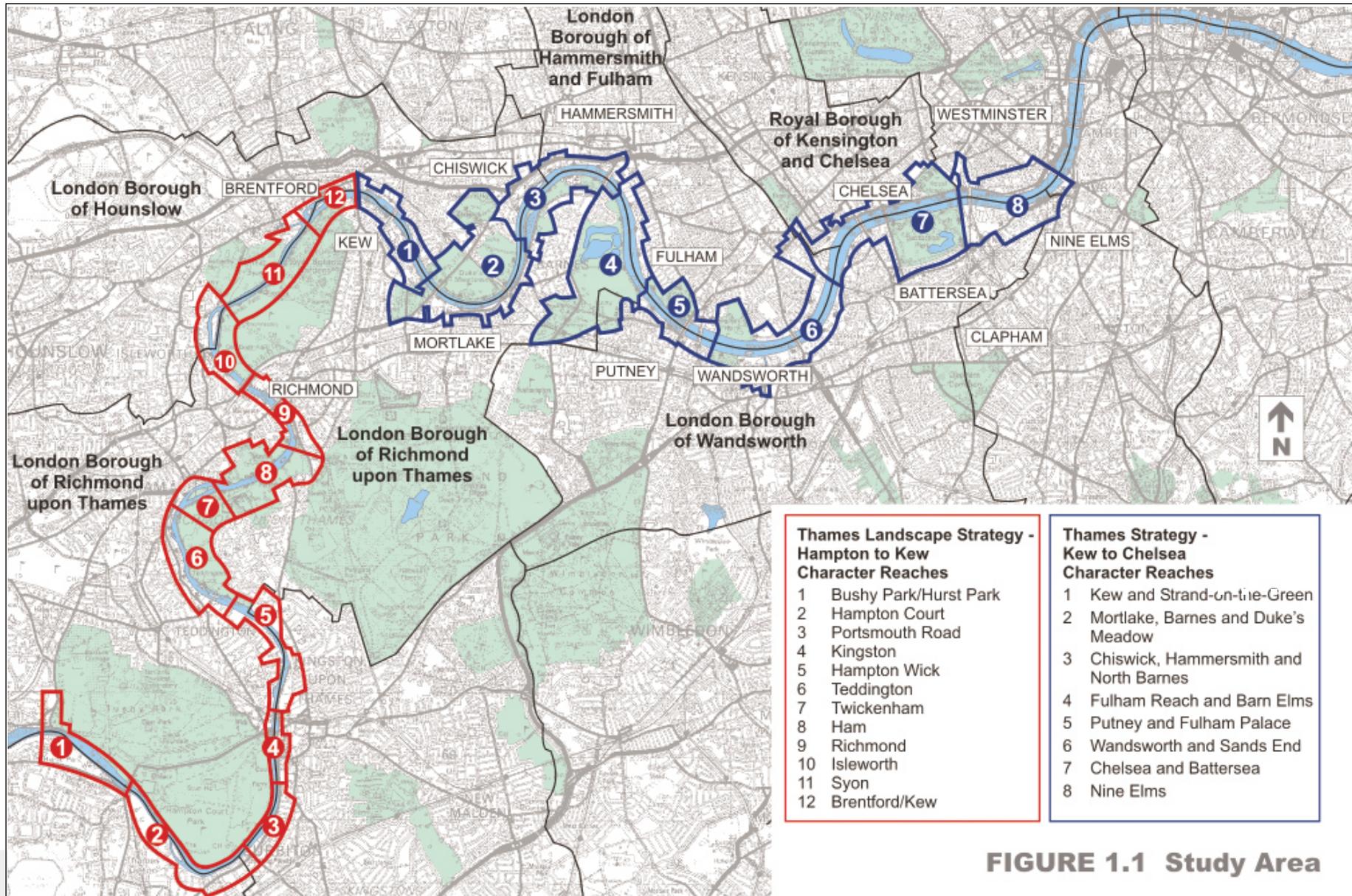


FIGURE 1.1 Study Area