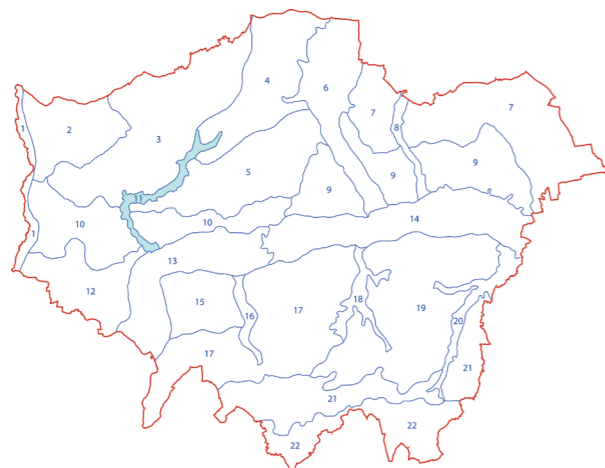


11. Brent River Valley



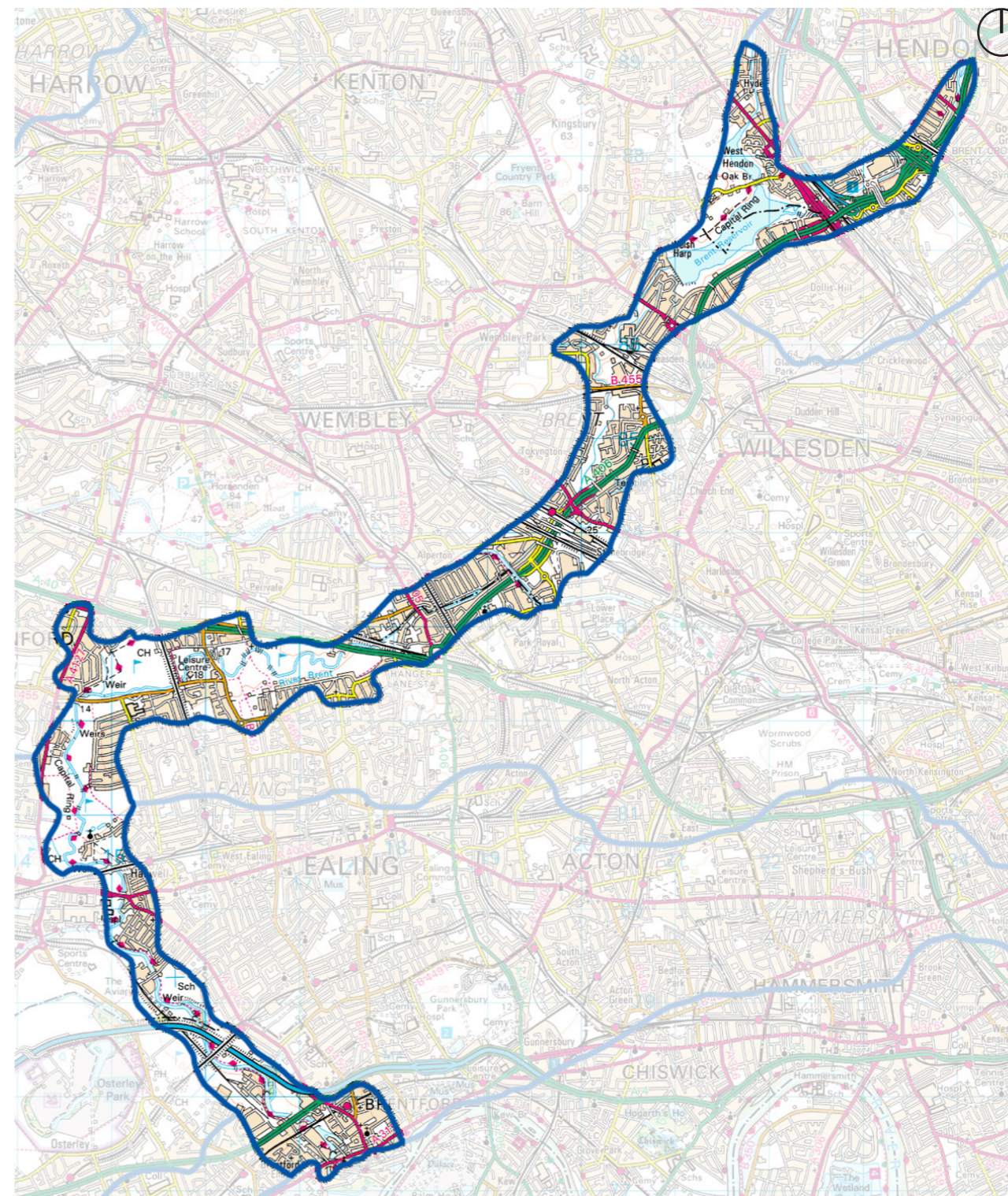
Key plan

Description

The Brent River Valley follows the course of the River Brent from the Brent Reservoir, near Neasden, west and south towards the Upper Thames. This is a relatively narrow valley (about 1km wide) enclosed by gentle, shallow slopes.

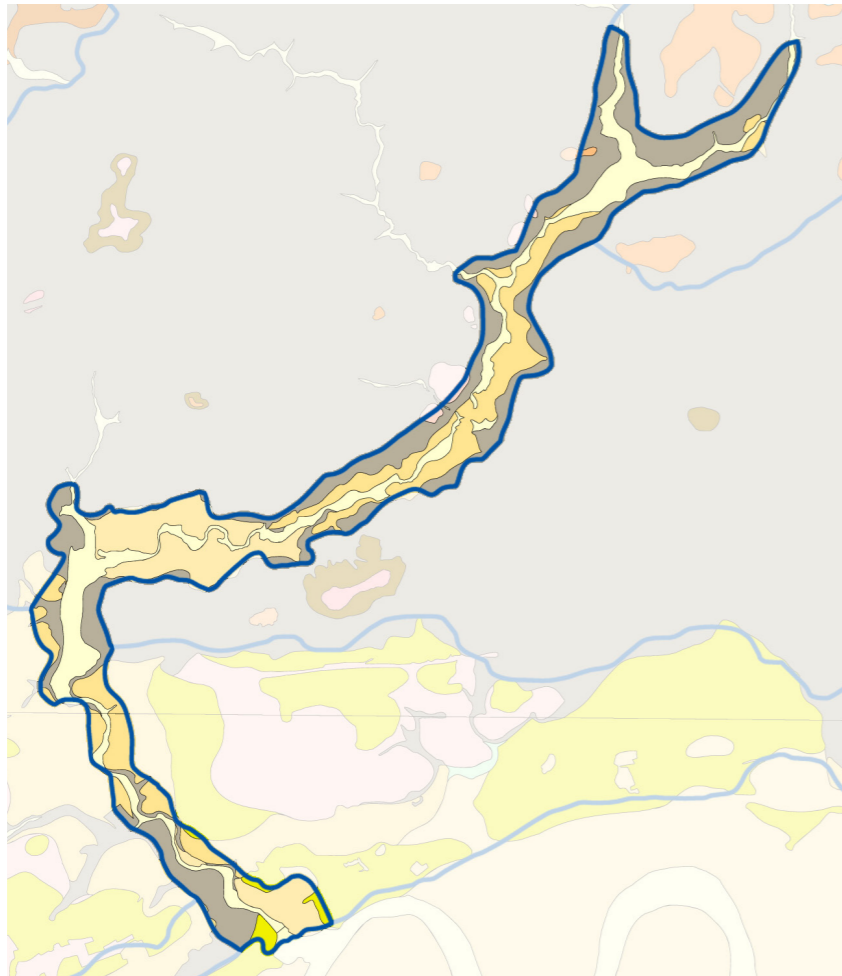
The geological bedrock is comprised of London Clay, with superficial deposits of gravels which become more extensive on the approaches to the Thames. Soils are for the most part seasonally wet loam along the course of the river with silty clay or weak mudstone on higher ground.

The older settlement dates from Victorian times, but these small terraces are surrounded by suburbs from the interwar period and the extensive industrial estates, which surround stretches of the river at the principal railway junctions of Neasden, Brent and Park Royal. Urban development is sited on the valley sides, allowing the river for the most part to meander within open space. The exceptions to this are at Neasden Junction and between Brent Junction and Park Royal, where the river is channelled with extensive revetment work in order to allow the Grand Union Canal to pass overhead by viaduct. The River Brent is later joined by a branch of the Grand Union Canal at Hanwell Hospital. The open spaces within the floodplain are typically maintained as sports fields and golf courses, with small patches of woodland near the M4.

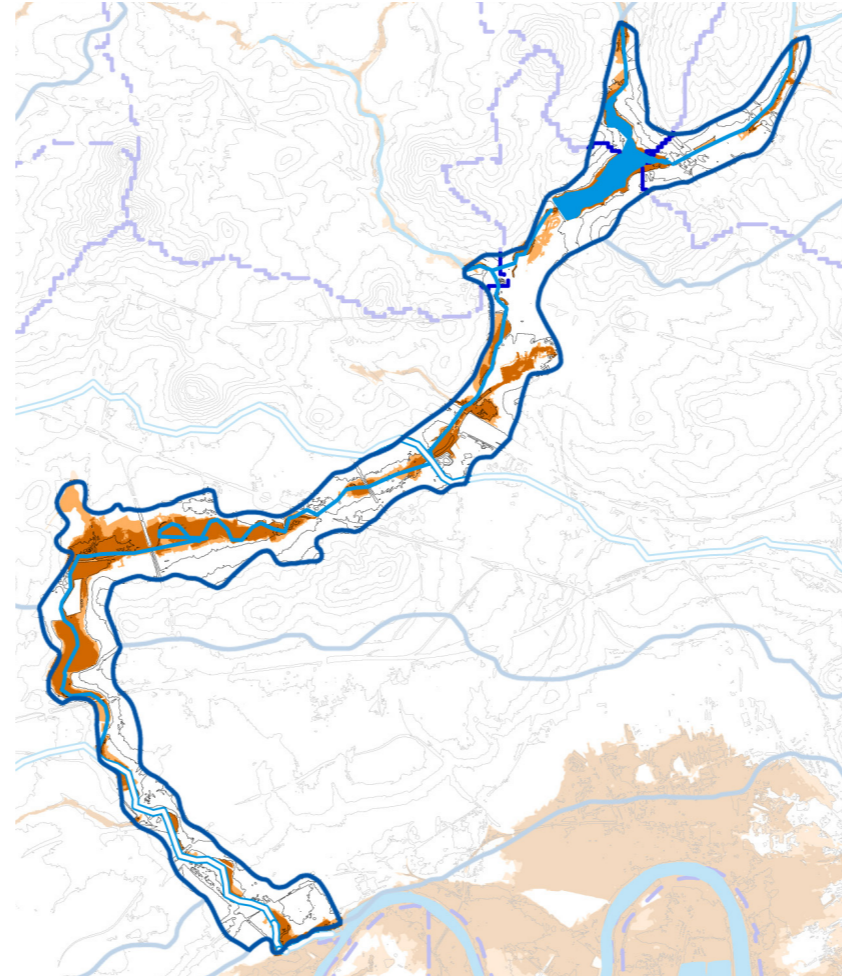


11. Brent Valley

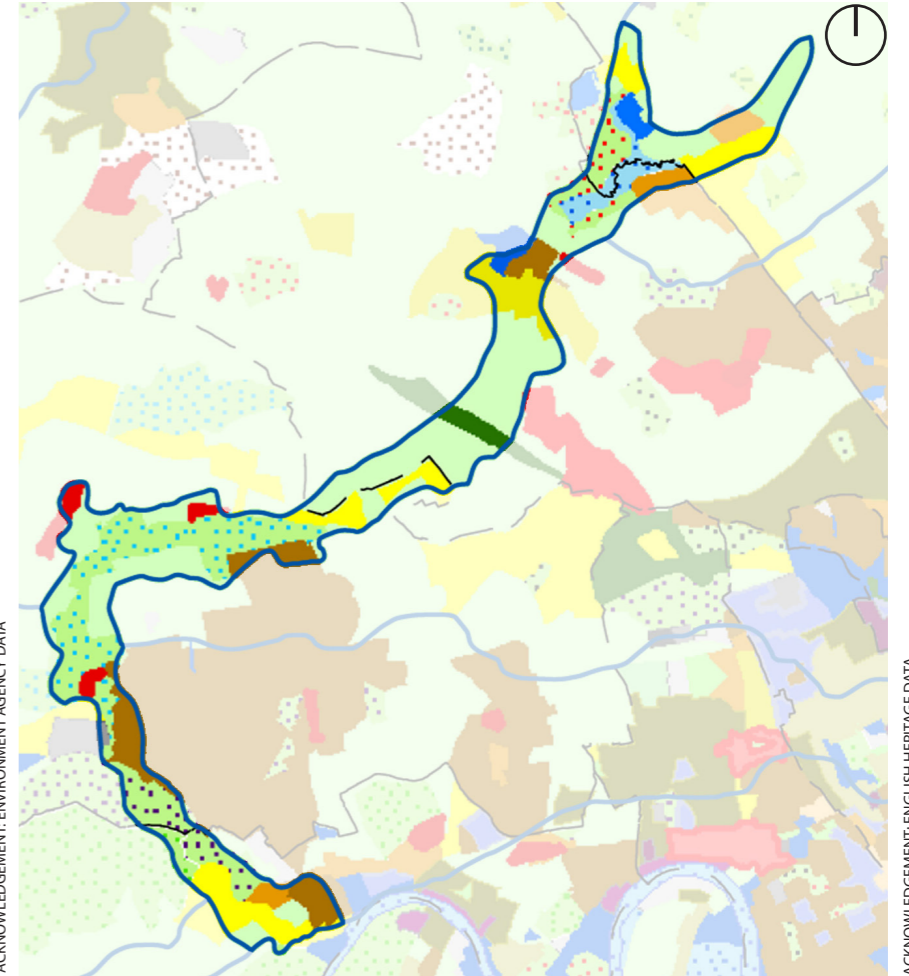
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Geology



Rivers and Topography



Historic Development

Natural Signature and natural landscape features

Natural Signature:
Brent River Valley – Meandering, shallow river bordered by diverse floodplain meadows and winding strips of damp woodland.

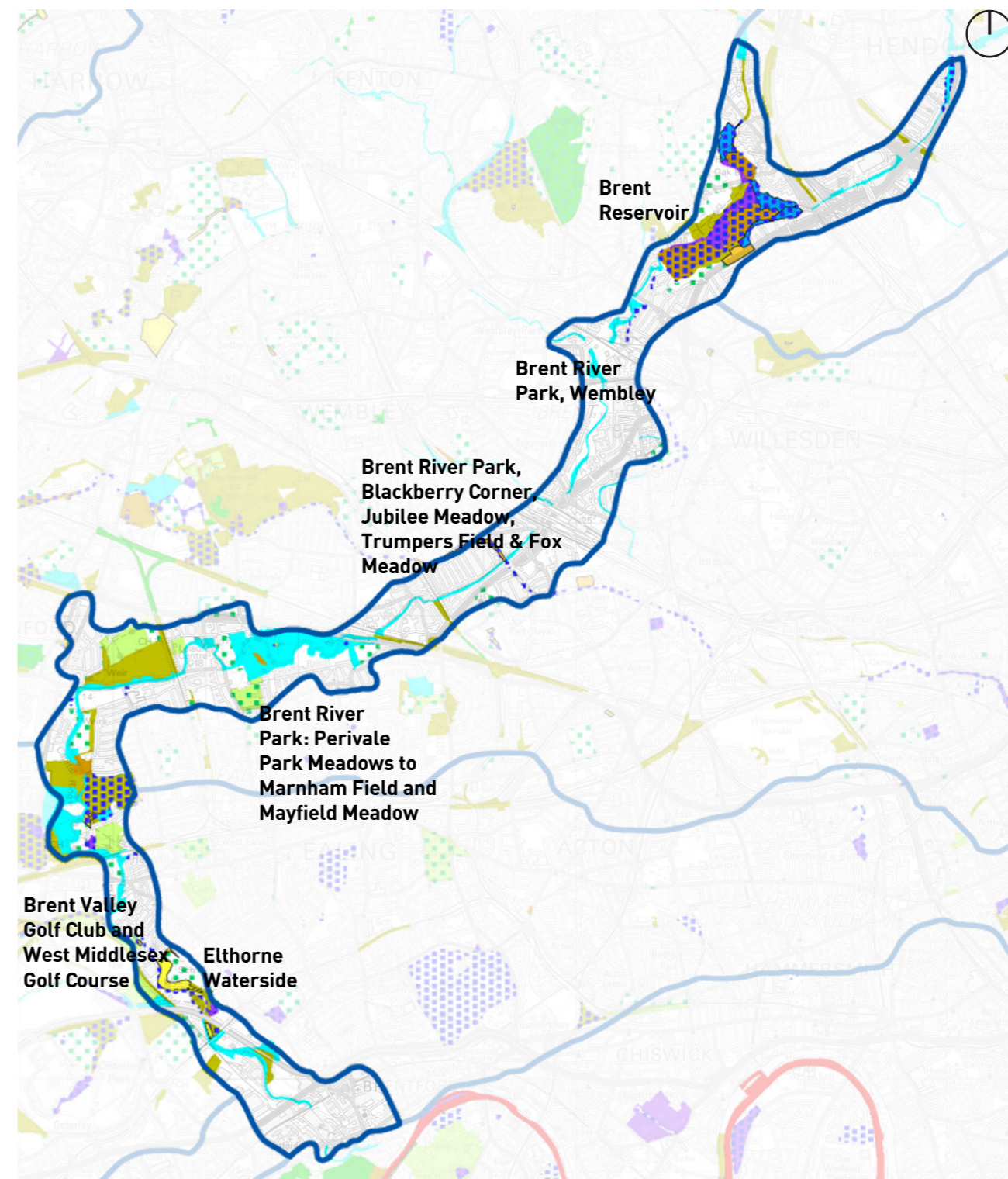
The River Brent flows within a well-connected green corridor of remnant semi-natural woodland habitats and marginal vegetation which also surrounds the Brent Reservoir. Together these areas form a 'core' ecological network along the Brent Valley. Their biodiversity value is enhanced by the surrounding soft landscape uses (golf courses and playing fields) which buffer the core areas and provide accessible riverside walks.

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

- **Brent Reservoir** – Historically the reservoir has fluctuated in size, from 69 acres at the time of its construction (1834/5) to over 400 acres in 1890, to its current size of 110 acres. Much of the surrounding lands are protected as SSSI or Local Nature Reserves and the site holds one of the country's largest breeding populations of great crested grebe. Common tern, kingfisher, reed bunting and several warbler species also breed here and in winter, the reservoir supports nationally important numbers of shoveler and gadwall. There is also an important invertebrate fauna associated with both wetland and drier habitats and this is one of very few known sites in London for water shrew. Part of the site is managed for nature conservation and there is a well-established field studies centre. Much of the floodplain is used as golf courses and playing fields, with patches of natural woodland or hedgerow along much of the course of the river.

- **Brent River Park, Wembley** – Formerly running in a straight concrete channel, the stretch of the River Brent through Tokyngton Recreation Ground and St Raphael's Open Space has recently been through a major restoration. The watercourse has been re-structured creating meanders and gently sloping sides in place of the former vertical concrete walls. As a result, the river is evolving through more natural processes and beds of finer gravels and sand settle towards the sides. The shallow slopes allow wetland plants to become established – some have been planted but others are colonising naturally. This quiet stretch of the River Brent has the feel of a small piece of countryside, isolated from the surrounding Wembley Stadium Industrial Estate. In fact the ground levels have been raised with landfill, and the course of the river altered. The river meanders around the west margin of the site, overhung in part by willows and other trees such as ash. Shingle is exposed in places along the riverbed.

- Brent River Park: Blackberry Corner, Jubilee Meadow, Trumpers Field & Fox Meadow** – The River Brent between the Uxbridge Road and the canal is flanked by semi-natural woodland on either side, greatly enhancing its value for wildlife. Willows and ash are the main tree species. There is a footpath along the west bank and the east bank is largely free from human disturbance. Three meadows south of the ‘Hanwell Flight’ series of locks are separated by outgrown hedges and are rich in wild flowers. The grasslands are all cut annually for hay. There are patches of shorter acid grassland, which have developed on areas where the top layers of soil have been scraped off. These contain characteristic wild flowers such as sheep’s sorrel and mouse-ear hawkweed. The railway cutting on the southern edge of the site has a few wild service trees, and a number of locally rare ferns, including hart’s tongue, black spleenwort and rustyback, grow in abundance on the Three Bridges.
- Brent Valley Golf Club and West Middlesex Golf Course** – The two golf courses have semi-natural grassland communities and a mix of other habitats to add variety. Some uncommon plants including harebell and sand spurrey are found in the acid grassland communities and betony, a scarce plant in London characteristic of unimproved grassland, can also be found on the golf course. The river has a mixture of wooded banks and more open areas providing a variety of niches for plants and animals favouring wet habitats.
- Elthorne Waterside** – Elthorne Park has an excellent mosaic of vegetation communities providing niches for many different plants and animals. Some areas are unmanaged and succession is allowed to proceed unhindered, in other areas the grassland is managed under a number of different management regimes resulting in some of the most varied grassland communities in the borough. A variety of soil types occur as part of the park is on ‘made ground’ on top of a former rubbish tip. Well Meadow in the south-east of the site is surrounded by woodland and scrub.
- Brent River Park: Perivale Park Meadows to Marnham Field and Mayfield Meadow** – ‘Ridge and furrow’ can be seen in Perivale Park and there are remnant acid grassland, scrub, tall herb and wet grassland communities. Further valuable wildlife habitat is provided to the south of Ruislip Road by the semi-natural vegetation on both sides of the river. The river has natural banks throughout this section and several pools and riffles along its length. Large meadows occur at Bitterns Field and Mayfield Meadow. Mayfield and Greenford Island also has a block of developing woodland with a variety of native species, and a reed bed with purple loosestrife.



Natural Habitats & Landscape Key Features

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Underlining the natural signature of the Brent River Valley

Key influences

- Meandering river with riffles, pools and exposed alluvial/shingle banks.
- Richly diverse grasslands within a small area – variations from wet meadow to dry acid grassland communities on slightly higher land.
- Winding strips of native woodland alongside the River Brent and defining the outer edges of the floodplain.
- Floodplain meadows enclosed by sinuous hedgerows with hedgerow trees.
- Lines of willow trees along water course and tributary streams.
- Views to river from adjacent open spaces, roads and footpaths.
- Scrubby woodland edges, with ferns in shady, damp areas.

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, lines of trees, hedgerows and mown grass edges.
- Wildflower meadows enclosed by curving hedgerows or belts of native woodland.
- Lines of willow trees.
- Ferns and shady woodland species within courtyards.
- Wetlands, swales and wet ditches as a focus for built development.

Brent River Valley – Key environmental assets

Environmental Asset	Relevant borough	Notes
Brent reservoir	Brent	Important refuge and breeding site for many rare birds; much of floodplain made up of semi-natural acidic grassland.
Brent River Park, Wembley	Brent	Recently restructured to allow meandering and natural course: formerly concrete channelled; shallow slopes allow natural establishment of native species and creation of riparian habitat.
River Brent west of Stonebridge	Ealing	Runs through Northfield Industrial Estate and has some opportunist self set wildflower populations.
Brent River Park: Blackberry Corner, Jubilee Meadow, Trumpers Field & Fox Meadow	Ealing	Flanked by semi-natural woodland on both sides; semi-natural grassland at Billet Hat's Park cut annually for hay.
Brent River Park: Brent Valley Golf Club to Uxbridge Road	Ealing	River here has a variety of wooded and open banks; golf courses support semi-natural grassland between drives.
Brent River Park: Elthorne Waterside	Ealing	Matrix of vegetation and habitat patches including woodlands, wetlands, scrub and grassland; minimal intervention management regime allows for natural development; variety of soil types as area is on 'made ground'.
Brent River Park: Perivale Park Meadows to Marnham Field and Mayfield Meadow	Ealing	Ridge and furrow can be seen in both golf course and meadows; contains scrub and tall herb habitats; blocks of developing woodlands.