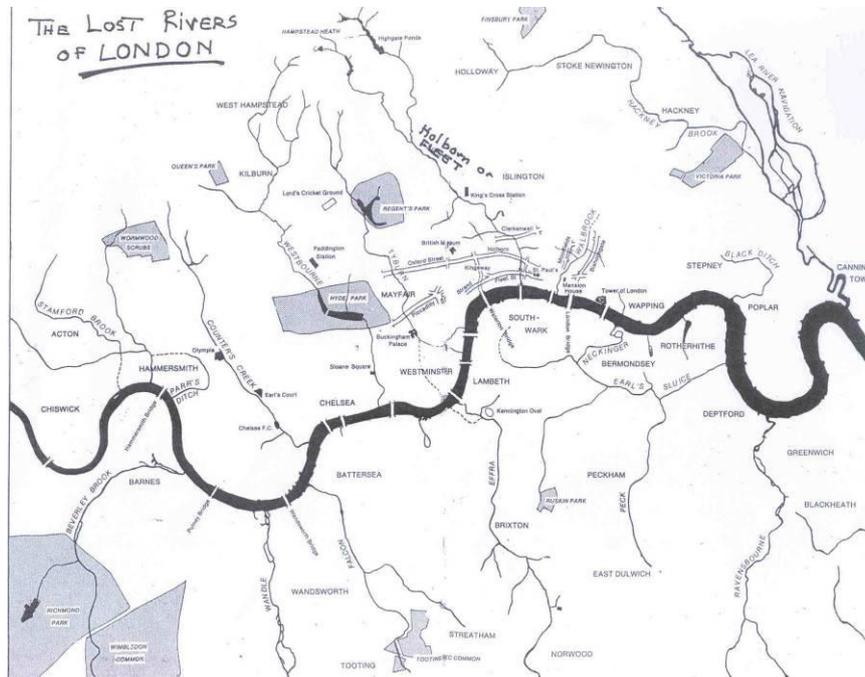


The lost rivers of London

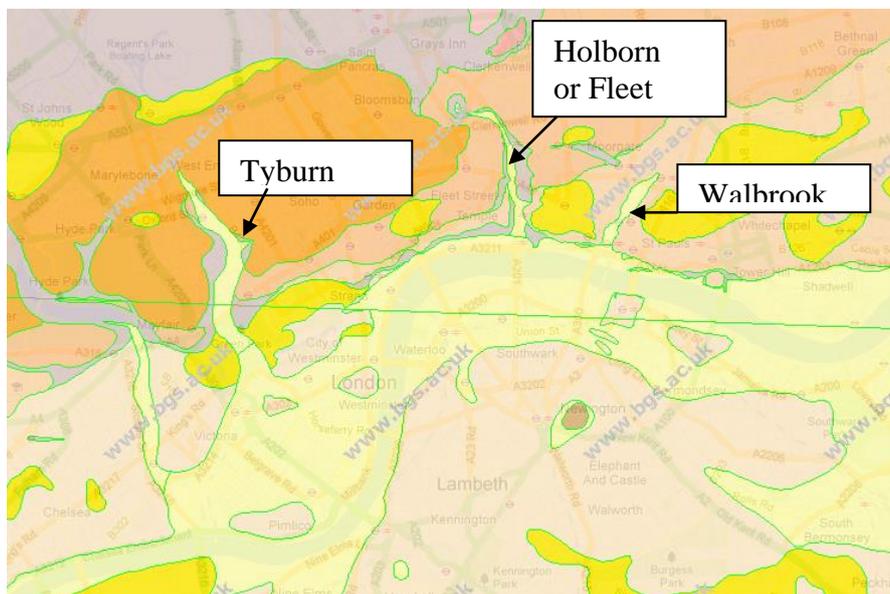
Mike Howgate

London has a number of rivers flowing into the Thames both north and south of the river, though this presentation dealt only with those north of the Thames and focussed on the Walbrook, the Fleet and the Tyburn. While the headwaters are often still above ground, in the suburbs, the City and Westminster, they are culverted and hidden. As early as 1598, John Stow described the Walbrook as already covered and hidden. A good book on the subject is N.J. Barton – *Lost rivers of London*.



Map showing the lost rivers of London

Many of the rivers can be traced. The London Topographic Society has published the Agas map and the Copperplate map showing Elizabethan rivers. Street names such as Cow Cross, Town Mill, Fleet Street, Knightsbridge tell of hidden rivers, as do early Ordnance Survey maps before the major development of London and its suburbs. One of the best sources is the North London Geological Survey map, where old river courses are picked out in alluvium.



Extract from Geology of Britain showing alluvium (in pale yellow). Copyright BGS

Archaeology can also provide clues. For example, excavations keep finding odd little unexpected culverts. There was a boom in rescue archaeology under Professor Miles just after the Second World War during the reconstruction period. In a transect across the River Walbrook, he found the Temple of Mithra.

There is also City mythology, such as the reputed stream under the Bank of England used by bank robbers to enter via the Walbrook culvert. However, this is a myth.

Subsidence also occurs due to lack of maintenance of the culverts. The Walbrook in the City of London runs alongside Mansion House and St Stephens Walbrook has huge cracks in the wall. These were underpinned by Sir Peter Palumbo when building No. 1 Poultry. The church was slipping into the Walbrook valley because it was founded partly on London clay and with the tower on alluvium.

Sewers in London came into the public eye with the book *The great stink* describing the work of Joseph Bazalgette, whose interception sewers intercepted all the rivers and use part of their flow to flush the system.

River Walbrook

The Walbrook probably starts on the fringes of Hackney, from springs at the base of the Hackney Gravels. The Roman riverfront was 60m back from the current riverfront and the Wlbrook approaches from Moorgate Circus and Spitalfields. In 1570, Moorfield, north of Moorgate, was open ground used for drying laundry etc. The Walbrook drains into the City Ditch (alongside the City wall) at All Hallows on the Wall. The Wlbrook had a water mill (probably an undershot mill with a 2-3 feet drop). In the 18th century a culvert was excavated with iron grilles at either end. The City Ditch runs from Moorgate through Bishopsgate and Aldgate to the Tower of London.

At St Margaret's Lothbury, one corner of the church is collapsing into a Walbrook culvert and St Mildred Poultry is no longer there but a substantial stream was described as going through it in 1860. At Walbrook, the street, excavations in 1956 discovered the Temple of Mithras, which was previously unknown, though Mithraian artefacts had been found in Victorian excavations for building foundations. The bust of Mithra was found on the day before the builders were due to move in and a 12-month stay of execution was granted for proper excavation. The Temple was moved to its present location about 200 feet away and it is now 10 feet above the surface when it was previously 20 feet below it. The Walbrook runs along Canon Street to the low-level northern interceptor sewer.

River Holborn (or Fleet)

This river has at least 4 names, the Holborn, the Fleet, the Turnmill Brook and the River of Wells. While the name Fleet has tended to stick, it should properly only refer to the tidal inlet (as far upstream as Holborn Viaduct). It is not on Fleet Street, which is the road leading to the River Fleet, just as Holborn is the road leading to the River Holborn.

Its source is on Hampstead Heath and Highgate, which is the source of a number of rivers, such as the Westbourne Tyburn and Fleet draining south, tributaries of the River Brent draining north and Hackney Brook and Mosul Brook draining east. Hampstead Heath is capped by Bagshot Sands and water dissolves iron to produce Chalybeate Wells. Springs occur at the junction with the Claygate Beds and drain into Hampstead and Highgate Ponds. The latter was built as part of the late medieval water supply of the City of London. The official source is the Vale of Health, one of the few places in London where bubonic plague did not occur but now a damp frost hollow. The other

arm of the Fleet arises near Kenwood House and the two arms join just north of Camden Town Station.

In 1800 it flowed down to St Pancras Station and there are paintings of bathers in the Fleet in 1815. It passed by Smithfield Market, where the traders were allowed to draw off water to wash their meat but not to discharge into it (though they often did). It became hemmed in by houses and rapidly became an open sewer. It flowed past the Fleet Prison, Fleet Bridge and Bridewell in 1670 and there was a major attempt to revitalise the river (by Sir Christopher Wren) after the Great Fire of London. The aim was to have the lower part of the Fleet as a Venetian style canal. The area north of Fleet Bridge was covered over and became a market and there are remnants in street names such as Turnagain Street, Newcastle Street (the coal trade) and Stone Cuttes' Street (the Portland Stone trade). The Romans also used the Fleet for unloading stone and Kentish Rag has been found in a ship at the mouth of the Fleet (one of 1500 loads recorded as being used for building the Roman wall of Londinium).

The river Fleet does not enter the Thames any longer. In the mid-19th century, Bazalgette designed a series of interceptor sewers with a 10 feet per mile gradient (self-flushing). The Northern low-level sewer goes to a pumping station in Stratford where it is pumped to the Northern high-level sewer, which has a natural fall to the Beckton treatment works. The sewers take water from the Highgate arm and the middle and lower levels of the Fleet to assist flow. However, the former outlet of the Fleet is still visible near Blackfriars Bridge.

River Tyburn

From the Belsize Park area, the River Tyburn crosses the Regent's Canal in a culvert then into Mayfair where it was called the St Mary bourne or stream to avoid the unsavoury connotations of the name Tyburn, hence with several changes in spelling to Marylebone.

Water from the Tyburn has been taken from the 13th century with conduits into the City of London via 3 miles of piping to Cheapside. The Tyburn valley is distinct in Green Park but the river was probably dry or just a trickle by the 1500s. It reached the Thames at Westminster with distributaries either side of Thorney Island. South of Buckingham Palace the land was very flat and Tachbrook Street might be a 17th century artificial cutting for floodwaters through Pimlico to Vauxhall Bridge.