Camden Strategic Flood Risk Assessment Addendum (February 2025)



Purpose of this document

Camden's Strategic Flood Risk Assessment (SFRA) 2024 was commissioned to support the review of the Camden Local Plan 2017. Camden's draft Local Plan 2024 and supporting evidence including Camden's Strategic Flood Risk Assessment (SFRA) were made available for comment from January to March 2024.

The purpose of this addendum is to respond to comments made as part of the consultation on the draft Local Plan 2024 which highlighted errors in the SFRA relating to the source of Camden's historic rivers.

1. Source of the River Westbourne

The Camden SFRA 2024 paragraph 3.3.3 states:

"Online records indicate the River Westbourne (previously named the River Kilburn) rises in Hampstead Heath, at Whitestone Pond. It was historically conveyed overland, flowing in a south westerly direction through Kilburn. Flows were subsequently conveyed away from the London Borough of Camden, toward Hyde Park and discharging to the River Thames, near to the Royal Hospital Chelsea. In the 19th Century, sections of the river were used as part of the sewer network. The channel was first culverted in 1827 and was completely submerged in 1871 due to urban development and increasing need for housing. In the present day, flows are conveyed as a Thames Water Utilities Limited combined sewer. It is now known as the Ranelagh Sewer."

Further information submitted in response to the consultation on the draft Local Plan has indicated that the source of the River Westbourne is likely to be Branch Hill Pond and Frognal Lane, instead of Whitestone Pond.

This is supported by the 'Red Frog Sub-surface Water Features Mapping (Arup, 2016) which states that:

"The River Westbourne, one of London's most famous lost rivers (also known at points along its length as the Kilbourne) rose from numerous springs and headwater streams on the western edge of Hampstead Heath. This study finds evidence that there are two major tributary headwaters of the Westbourne, which are located in the Redington Frognal area.

The Cannon Stream was a name given to the branch beginning at the former Branch Hill pond, which flowed down the route of the current Redington Gardens and Heath Drive, and was joined by minor spring-fed tributaries from near Blacket's Well (behind Rosecroft Avenue) and from Greenaway Gardens. These minor tributaries are likely to have been seasonally flowing and, by the turn of the industrial revolution, already modified somewhat for use as small field ditches or to form boundary hedgerows, and numerous small ponds marked on historical maps indicate that these were spring-fed ponds. The Cannon Stream then flowed beside Cannon Hill Street, which was named after the watercourse, before feeding ponds on West End. En route to modern Kilburn, this watercourse became known as the Kilbourne Stream. The second main tributary branch rose in the grounds of Frognal Hall, off Frognal Lane. Illustrations show spring-fed ponds in the grounds, and historical maps show small streams draining the hillside, flowing south to meet the Cannon Stream near Kilburn.

With the development in this area, by the turn of the twentieth century the open watercourses, springs and ponds had mostly disappeared from the surface and were either placed into culverts or infilled."

2. Source of the River Tyburn

The Camden SFRA 2024 paragraph 3.3.4 states:

"The source of the River Tyburn is found in South Hampstead, north of Primrose Hill. Flows are conveyed in a southerly direction, toward Regent's Park and Victoria. The discharge point is found on the River Thames, near to Vauxhall Bridge. All sections of the River Tyburn were converted to a combined sewer in 1860. Prior to this, only sections of the river were culverted."

Further information submitted in response to the consultation on the draft Local Plan has indicated that the source of the River Tyburn is likely to be Shepherd's Well, Hampstead, instead of South Hampstead.

Extract from 'Red Frog Sub-surface Water Features Mapping' (Arup, 2016)

"At the southern edge of the Redington Frognal area, Fitzjohn's Avenue is the location of the source of the River Tyburn. The Shepherd's Well was likely engineered by leading or piping springwater in the vicinity to a collection point. There is substantially more recorded about this well and system than has been recorded about wells and springs feeding the source of the Westbourne. Sources indicate that the stream flowing from the Shepherd's Well was exploited by forming a conduit to deliver this higher quality water to London."

3. Summary

This addendum clarifies that for the purpose of the SFRA the likely source of the lost River Westbourne is Branch Hill Pond and Frognall Lane, and the likely source of the River Tyburn is Shepherd's Well. This updates paragraphs 3.3.3 and 3.3.4 in the SFRA 2024.