# **The River Tyburn and Thorney Island**

### Desmond Donovan

#### Introduction

The Tyburn (Fig. 1) is one of the smaller 'lost rivers' of London.<sup>1</sup> Rising near Hampstead, it follows a south-southeasterly course. It feeds the pond in Regent's Park and then flows beneath Marylebone and Green Park to Buckingham Palace. From here, the King's Scholars' Pond Sewer continues the south-south-easterly direction. The outfall to the Thames is a short distance upstream of Vauxhall Bridge at TQ 2987 7806.

Guide books and popular works<sup>2</sup> tell us that the river divided into two branches at Buckingham Palace: the King's Scholars' Pond Sewer already noted, and a stream heading towards Westminster Abbey, joining the Thames somewhere south of the Houses of Parliament. Some writers admit that there is some doubt about this second branch, though most explain that, before reaching the Thames, it separated into two streams which isolated Thorney Island, the legendary site of Westminster Abbey.<sup>3</sup>

The southern or King's Scholars' Pond Sewer branch is well established; in the medieval period it formed the boundary between the manors of Westminster and Eye,4 which became the boundary between Westminster and Chelsea. It was shown on the earliest Ordnance Survey large-scale maps (1:2500, 1890s, now online as 'historic' maps) and indeed bisects the enclave of Buckingham Palace, wherein boundary stones survived at least until the 1890s survey. South of the Palace it has an irregular course consistent with its origin as a stream, ignoring modern property boundaries until it reaches Tachbrook Street, formed by covering it over in 1842-44.5

The eastern or Westminster branch, on the contrary, is described in the recent Victoria County History volume on Westminster as 'an unsubstantiated watercourse from the abbey to the Tyburn'.<sup>6</sup> The main purpose of this contribution is to discuss this second branch and its supposed relationship to Thorney Island.

## J.G. Waller and the Westminster branch

John Green Waller (1813–1905) was an artist and antiquary, a founder of the British Archaeological Association and of the London and Middlesex Archaeological Society. He was a Fellow of the Society of Antiquaries.<sup>7</sup>

Waller, in his paper on the Westbourne and the Tyburn,<sup>8</sup> was much concerned with boundaries described in Anglo-Saxon charters. He interpreted a charter of King Edgar, supposedly dated to 951, as referring to the Westminster branch of the Tyburn. Because the charter did not (in his view) refer to the King's Scholars' Pond Sewer branch, he concluded that the latter did not exist at that date.<sup>9</sup> He therefore regarded the Westminster branch as the original, natural course of the river Tyburn to the Thames. He described it following the course of James Street, then the west part of Caxton Street and Orchard Street, then joining Great College Street, along which it flows due east to the site of the Abbot's Mill<sup>10</sup> at the outfall to the Thames, south of the Victoria Tower of the Houses of Parliament. On the map in his paper,

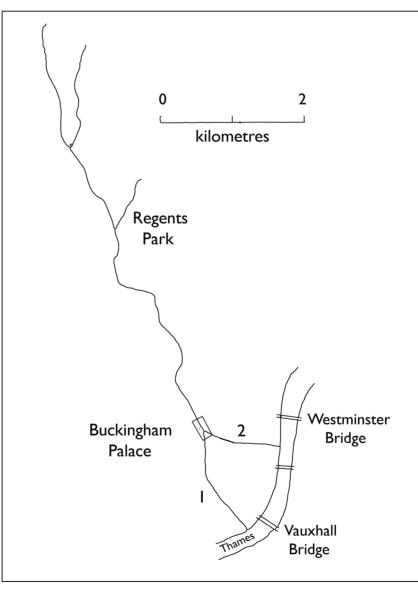
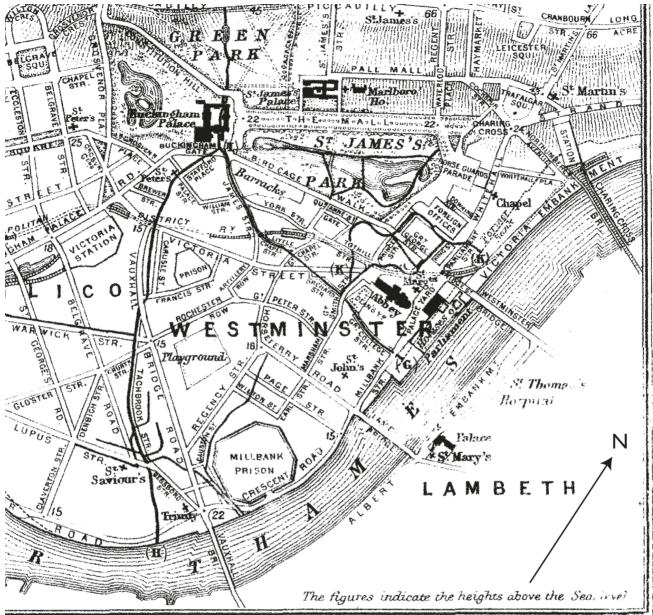


Fig. I: sketch map of the River Tyburn (modified from Nunn, 1983): I: King's Scholars' Pond Sewer or Vauxhall branch. 2: Westminster branch



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Fig. 2: part of Waller's map, 1890, enlarged. The River Tyburn and its supposed branches are shown by thick lines. 'Palace' on the east bank of the Thames is Lambeth Palace. A north point has been added.

however, he showed both the southern and the Westminster branches (Fig. 2).

Nunn, in a research paper on the Flandrian evolution of the Thames,<sup>11</sup> concluded that the southern or Vauxhall Bridge Road branch was the original course of the river, but that it became silted up, being on the inside of a developing meander of the Thames, whereupon the river 'cut the Westminster outlet'.

#### Westminster waterways

Early maps of Westminster, the first being in 1572,<sup>12</sup> show an outfall to the Thames south of Westminster Abbey. North of the outfall is a building labelled 'The slaught/er howse', south is

a building which may be the mill. John Norden's map of Westminster, 1593, has the annotation 'The Q[ueen]s slaugh/ter howse / The myll' (Fig. 3). This [Abbot's] mill was rebuilt and enlarged in 1502/3,13 so this channel was older than that date. It lay south of the boundary wall of the Abbey precinct. This was 'The Dead Wall' of Ogilby and Morgan's map of 1682, part reproduced by Tatton-Brown,14 which shows the watercourse (crossed by bridges). The first (1870s) edition of the Ordnance Survey large-scale plan records 'Site of the Long Ditch' here. The same plan marks 'Site of the Abbot's Mill' at TQ 3025 7930. It lay north of No. 1 Millbank, now the

Ecclesiastical Commissioners' building.

I have given some detail about this watercourse because it may, in fact, be the only evidence for the existence of the 'Westminster branch' of the Tyburn.

The 'Long Ditch' is only known for a length of 250m or so. Where did the water come from? A spring is unlikely in the alluvial plain of the Thames. Tatton-Brown<sup>15</sup> has proposed an explanation of the elusive Westminster branch. He supposes a man-made channel bringing water from the Tyburn to Westminster Abbey.

The Westminster monastery in its very obscure earlier history was small. It was rebuilt on a much larger scale by Edward the Confessor in the mid-11th century. Building continued after the Confessor's death in 1065, including the dorter, *c*. 1066–1075, and the reredorter 'late 11th century'.<sup>16</sup> The channel from the Tyburn may have been made in the first place to 'flush out the monks' reredorter'<sup>17</sup> (and presumably the nearby kitchen and infirmary) in the 1080s. The length of the whole 'branch' would be about 1.25 km. Tatton-Brown<sup>18</sup> discusses the water supply of the monastery in some detail and his interpretation is in line with the situation in other large monasteries.

It is unusual for a small river such as the Tyburn to divide into two branches near its mouth. There is no question of a delta. An artificial channel is a likely explanation, the more so because the supposed further bifurcation of the 'Westminster branch' to form Thorney Island was due to a misinterpretation by Waller, as will now be explained.

#### J.G. Waller and Thorney Island

Waller19 described the Westminster branch of the Tyburn, for him the original route of the river to the Thames, as detailed above. He then turned to the 1593 map of Westminster by John Norden. This large-scale map (Fig. 3) appears to be a remarkably accurate record of the streets and built-up areas from Tootehyll streete [i.e. Tothill Street] in the southwest, past Charing Cross to the Strand, Covent Garden and Drury Lane. Buildings are shown in perspective and it does not have a scale, but it does have a north point, showing that the map is drawn with approximately west-north-west at the top.

The map does not show the King's Scholars' Pond Sewer section of the Tyburn, joining the Thames at Vauxhall, because it does not extend so far south. In St James's Park, it shows a stream issuing from a pond [Rosamund's pond] and flowing north-east. Several ditches connect with the stream. They are straight with right-angled bends, showing that they were artificial. Nearby to the east, a second set of ditches are at least largely artificial. These ditches (Fig. 4 A) lie north of Tootehyll streete and of the Abbey and the adjoining Sanctuary. They were probably drainage ditches for the Abbey's fields before St James's Park was created in 1530 by Henry VIII.

They were destroyed by later changes and landscaping.<sup>20</sup>

Waller misinterpreted the more easterly set of ditches on Norden's map as a branch of the Tyburn, and assumed a connection with the channel which has its outfall at the mill (Fig. 4 B), although Norden does not show one. Such a link, Waller supposed, had been 'doubtless arched over for the convenience of dwellings'.<sup>21</sup> He further wrote that 'we know that it [the assumed Tyburn branch] had an exit into the river a short distance west of Privy Stairs' This was in fact the Clowson stream, another artificial waterway made for drainage.<sup>22</sup> On the map which accompanied his 1890 paper this outfall is north of Westminster Bridge at about TQ 3035 7990 (Fig. 2).

From these artificial channels Waller concluded that ... 'Thus we have the Abbey site isolated by a watercourse, which, divided into two, might ... be called the double brook or

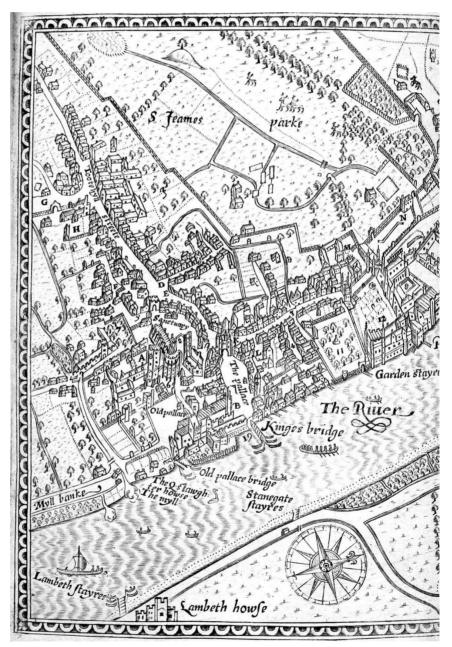


Fig. 3: the southern part of John Norden's map of Westminster, 1593. Watercourses are distinguished from streets by a thin wavy line or lines between the bounding lines. This does not apply to the southern outfall at *The Myll*, which has a bridge, and the ones flanking *Myll banke*. The zig-zag feature between the two sets of ditches north of *Tootehyll* streete has a different pattern which may indicate a track or footpath. Westminster Abbey with its prominent apsidal east end is seen below *Sanctuary*. Henry VII's Chapel is not shown, but St Margaret's church with its western tower is seen to the right of the Abbey. *Lambeth howse* on the opposite side of the Thames is Lambeth Palace. Scan courtesy of Philip Burden.

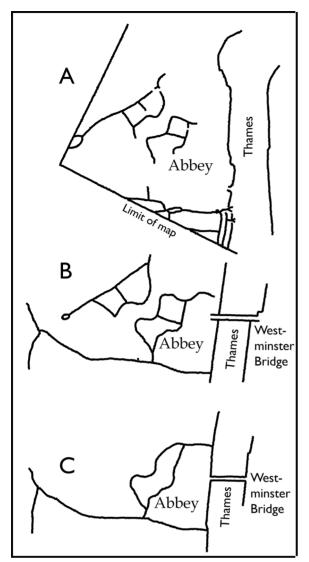


Fig. 4:

A: stream and ditches from Norden's map, 1593; B: the Westminster branch of the Tyburn and its branches as shown in Waller' map, 1890; C: the same as shown in the 1936 Geological Survey Six-Inch map

Teo-burn ...'.<sup>23</sup> He further identified the area thus isolated, the site of Westminster Abbey, as Thorney Island, probably from Widmore or a later source (see below).

#### The Geological Survey Six-inch map

In 1878 Edward Stanford published the first large-scale geological map of London, on the scale of six inches to one mile. Central Westminster is underlain by 'alluvial deposits', while 'gravel & sand' (i.e. Thames terrace gravels, mainly) outcrop to the north and west, and across the Thames in Southwark. The Geological Survey of England and Wales (now the British Geological Survey or BGS) began mapping the London district on the sixinch scale in 1910 and published its own map in 1920. The local 'gravel and sand' was now identified as the Upper Floodplain Terrace of the Thames, and an isolated outcrop in the area of Westminster Abbev and the Houses of Parliament was shown<sup>24</sup> (Fig. 5). The 'lost' rivers were also marked on the Six-Inch maps. In the case of the Tyburn, both the southern and the Westminster branches were shown, and unfortunately also the branches that Waller had invented on the basis of Norden's streams and ditches (Fig. 4 C; Fig. 5). They occupied a tract of alluvium about 270m wide between the main gravel outcrop in St James's Park and the Westminster gravel patch. This arrangement has served authors as the 'bifurcating' mouth of the Tyburn ever since.

#### **Thorney Island**

The area originally described by the name is unknown. John Flete, an early historian of Westminster Abbey, cites 11th-century documents in the Abbey

library which name Thorney as the place where Westminster Abbey was founded.<sup>25</sup> J. Armitage Robinson, paraphrasing Flete, wrote:

The Thames with its tides surrounds Thorney Island, two miles from the city. Here this wealthy Christian erected a church, and asked Mellitus to come and consecrate it. [Christians were summoned to the area] Tents were fixed half a mile from the church, for an inundation of the river prevented nearer access the night before. ... St Peter appeared on the bank of the Thames, and called to a fisherman to take him across. [The fisherman was rewarded with an enormous catch].

Flete's Latin text, which Robinson describes as 'clumsy and long-winded', in fact mentions Thorney Island in four

separate places. Flete's sources were describing a miraculous event, the appearance of St Peter himself to consecrate the new church. The story does not necessarily refer to a particular place.

John Flete's 15th-century account was not printed until 1909, but the Thorney Island story was published in English by Richard Widmore, the Abbey Librarian, who could no doubt read the Flete mss, in 1743 and 1751.26 This or a similar source was no doubt known to 19th-century antiquaries. It was probably due to Waller's paper of 1890 that the location of Thorney Island entered popular guide books, such as Bell's guide to Westminster Abbey (1902), and also more scholarly works. Nunn<sup>27</sup> identified Thorney Island as the whole area between the southern and Westminster branches of the Tyburn, but he has not generally been followed.

Modern authors have regarded the isolated gravel outcrop, on which the Abbey and the Houses of Parliament stand, as representing Thorney Island, e.g. a 'sand and gravel island ... formed by the bifurcation of the River Tyburn where it met the Thames'.<sup>28</sup> Whether or not the watercourse from Buckingham Palace to Westminster is accepted as artificial, the 'bifurcation' of Waller can no longer be accepted. The streams north of the gravel outcrop, e.g. on the Geological Survey Six-Inch map (Fig. 5), are a fabrication.

Thomas<sup>29</sup> published a computergenerated contour plan based on data from 'modern excavation, antiquarian observations and boreholes.' This was said to show the topography of the gravel surface at *c*. 10,000 BC. Sea level of course was then much lower than now, the River Thames flowed in a now-buried channel somewhere away to the south, and the gravel was being dissected. The gravel surface of the 'island' in Thomas's map has a relief of about 5m. However, by Anglo-Saxon time this had been buried by late Quaternary deposits.<sup>30</sup>

#### Conclusion

The Westminster branch of the River Tyburn is an artificial channel. The formation of Thorney Island between two channels of the Tyburn derives from a misinterpretation of early maps and is no longer valid. The extent of the

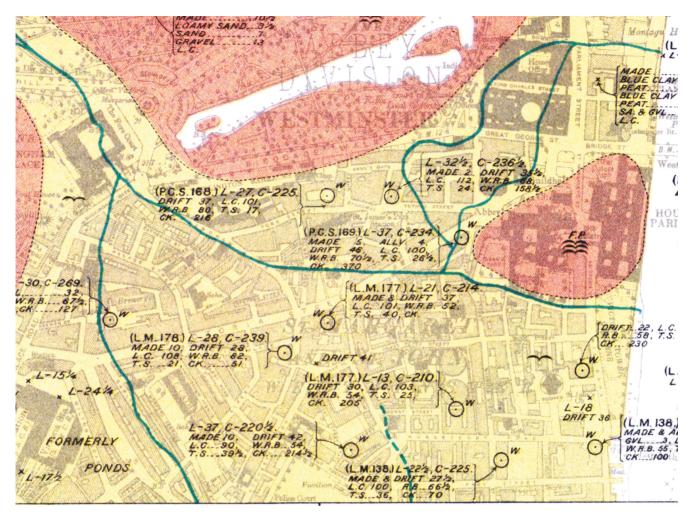


Fig. 5: part of the Geological Survey map of London at six inches to one mile, sheet v SW, published 1936. St James's Park lake top left, the River Thames to the right. The pink areas are Upper Floodplain Terrace, the remainder Alluvium. Waterways are in blue, including the supposed branches of the Tyburn between the two areas of Upper Floodplain Terrace. The plans of Westminster Abbey and the Houses of Parliament can be seen in the isolated pink area. (Reproduced in accordance with Permit Number CP16/008 British Geological Survey © NERC 2015. All rights reserved).

medieval Thorney Island remains uncertain. It appears to have been an island in the tidal Thames.

#### **Acknowledgements**

I would like to thank Tim Tatton-Brown

I. N.J. Barton *The lost rivers of London* revised ed. (1982) 14 and Map I.

2. For example see op cit fn 1; R. Trench and E. Hillman London under London (1985); P. Talling London's lost rivers (2011).

3. The question is summarised by Tatton-Brown, in press, 2015? The medieval and early Tudor topography of Westminster, Transactions of the British Archaeological Association Conference, 2013?).

4. See T. Tatton-Brown 'Westminster topography' London Archaeol 14 (2014) 45–8; P.E.C. Croot et al. (eds) Victoria County History of Middlesex 13(1) (2009) 2.

5. S. Bradley and N. Pevsner The Buildings of England. London 5: Westminster (2003) 772.

6. Croot et al op cit fn 4.

 Friends of Nunhead Cemetery, see www.fonc.org.uk/past-exhibitions/jg-wallerbicentenary.html (accessed 12 April 2016).
 P.G. Waller 'The Tybourne and the Westbourne' *Trans London Middlesex Archaeol Soc* 6 (1890) 244–79. for numerous discussions and information. Philip Burden gave me information on mapmaker John Norden and electronic files of his maps of Middlesex and Westminster. Fig. 5 is reproduced in accordance with Permit

9. Ibid., 258–63.

10. Ibid., 258; op cit fn 3.

11. P.D. Nunn 'The development of the River Thames in central London during the Flandrian' *Trans Institute British Geographers* 8(2) (1983) 187–213.

 G. Braun and F. Hogenberg (1572) Civitates Orbis Terrarum. F. Barker and P. Jackson The history of London in maps. (1990) 13, believe that this map was based on a survey of about 1550.

13. T. Tatton-Brown op cit fn 4, 48.

14. Ibid., Fig. 3.

15. Ibid., 48 and Fig. 2.

16. Op cit fn 5, 193, 199.

17. Op cit fn 4, 48.

18. Tatton-Brown, The medieval and early Tudor

topography of Westminster, in prep.

19. Op cit fn 8, 258.

20. T. Tatton-Brown, pers. comm.

21. Op cit fn 8, 264.

No. CP16/08, British Geological Survey. Desmond Donovan was professor and head of the Department of Geology at University College London, 1966-1982. In retirement he continues research on the Jurassic and the Quaternary.

22. Tatton-Brown, *op cit* fn 4, Fig. 2; S. Thurley Whitehall Palace (1999) 41, 43, 57, 60.

23. Op cit fn 8, 264.

24. Six-Inch sheet London V SW. See also the One-Inch New Series geological sheet 270 (1921).

25. J. Armitage Robinson (ed) John Flete, The history of Westminster Abbey (1909); see also B. Harvey Westminster Abbey and its estates in the Middle Ages (1979) 20.

26. R. Widmore, An enquiry into the time of the first foundation of Westminster-Abbey (1743); An history of the Church of St. Peter, Westminster (1751).
27. Op cit fn 11.

28. B. Sloane, H. Swain and C. Thomas 'The Roman road and the river regime' *London Archaeol* **7**(14) (1995) 359–70.

29. Ibid., Fig. 2.

30. D.T. Donovan The Quaternary geology of Westminster, in prep.