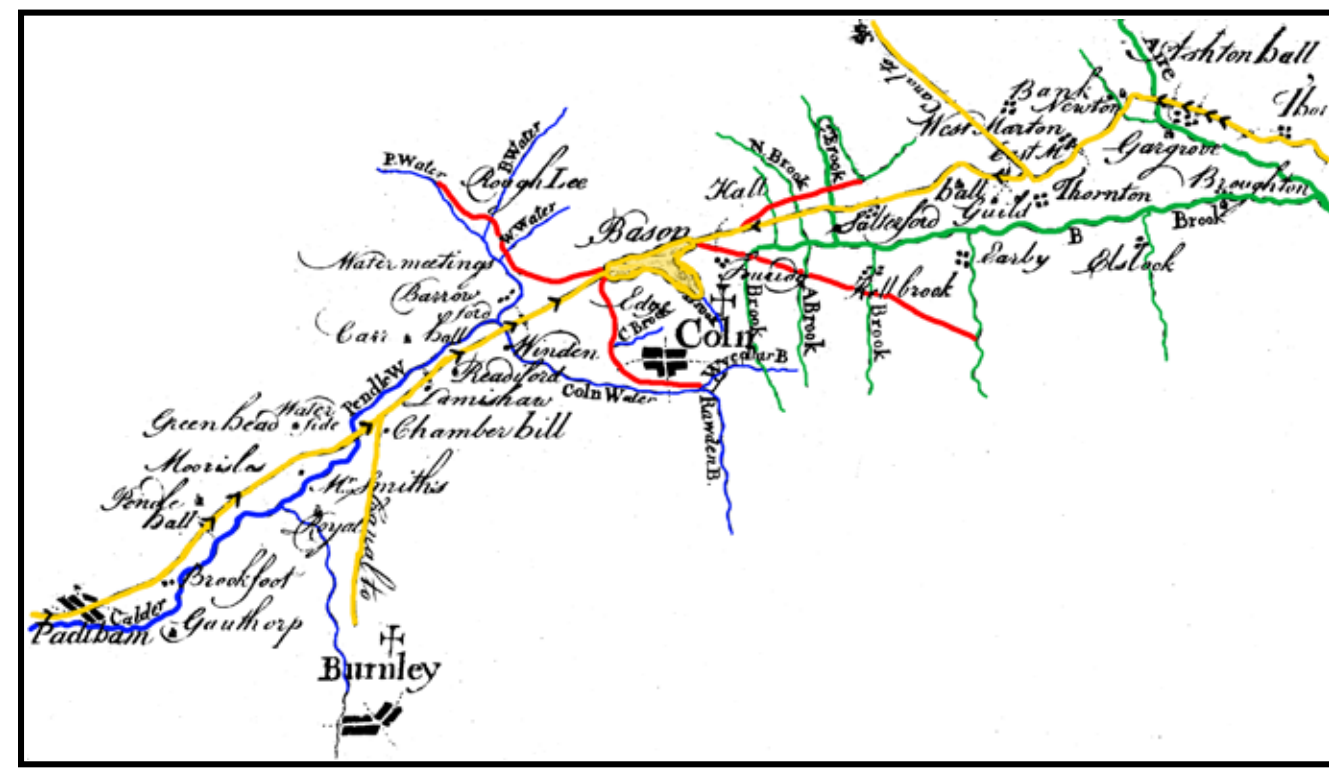
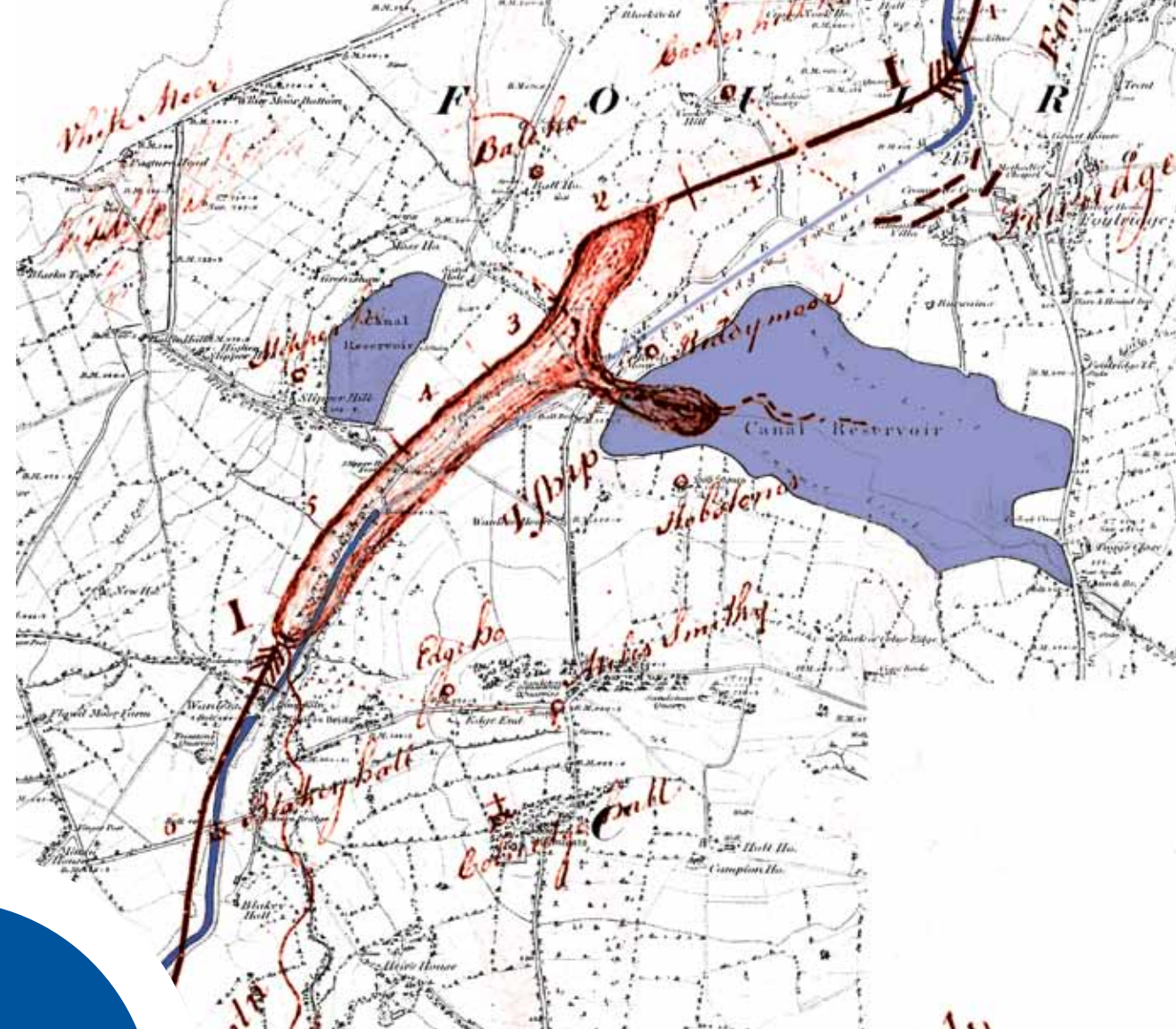


# WATER SUPPLY



Right from the start, it was intended that the canal's water supply would be stored in a bason at Foulridge. In this 1768 map, the canal is in yellow, canal feeders in red, water running westward into the Ribble in blue, and water running eastward into the River Aire in green. The Leeds & Liverpool Canal is unusual in that it crosses the watershed three times: from the Ribble to the Aire at Foulridge, back to the Ribble at Barnoldswick, and then again to the Aire below Greenberfield.

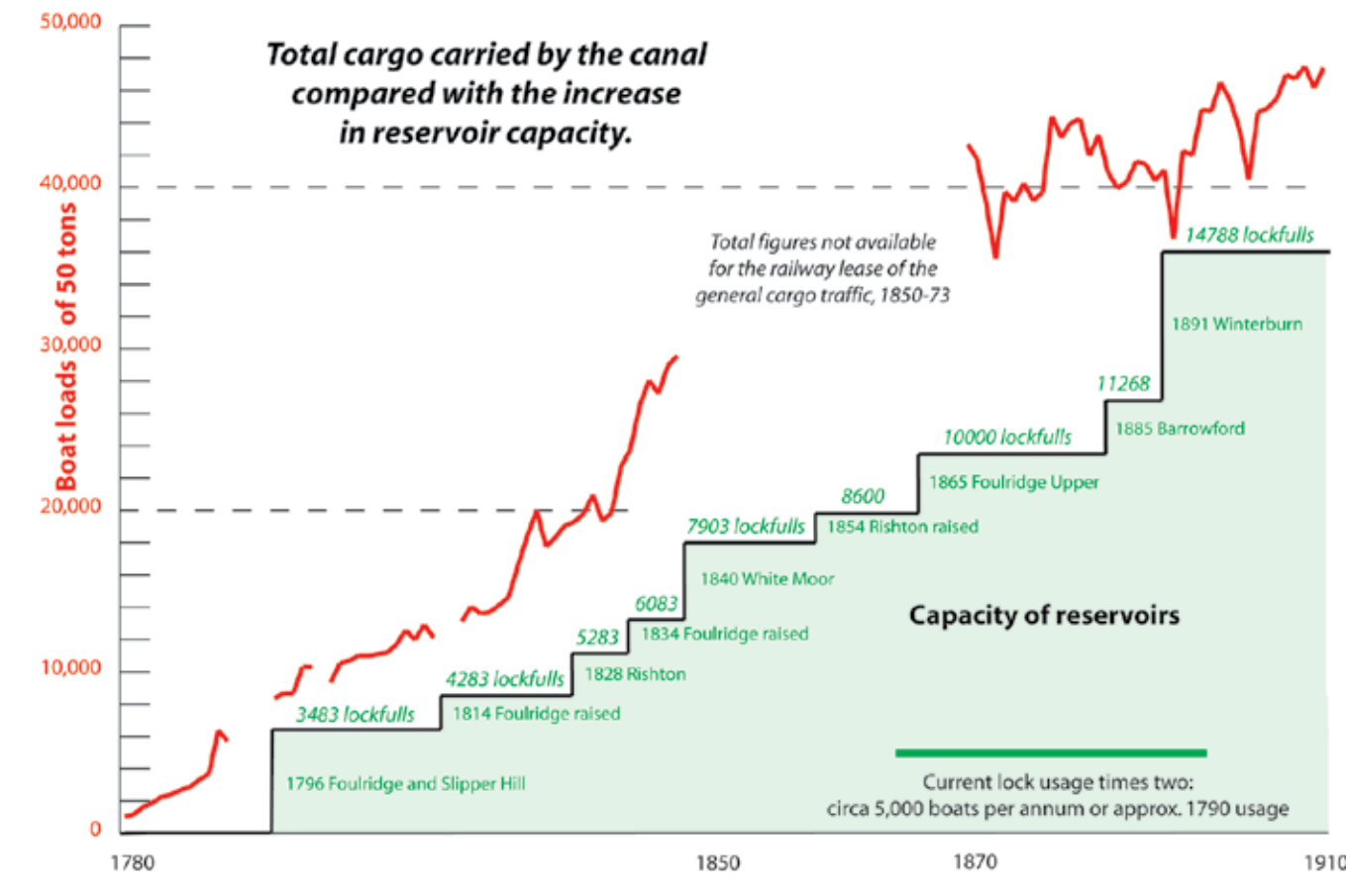
This map shows the original bason for the canal's water supply in red, with the reservoirs as built in blue. Originally, there was to be no tunnel. It was built to lower the summit level by 30 feet, and thus increase the amount of water available to the canal.



The two original reservoirs: Foulridge and Slipper Hill. Before the canal opened from Gargrave to Foulridge in 1794, water for the canal below Gargrave had been supplied by streams.



Local land owners sometimes had fishing and shooting rights on the canal reservoirs. Slipper Hill, Winterburn and the Foulridge reservoirs had boat houses, this one at Foulridge Upper, seen with the reservoir drained.



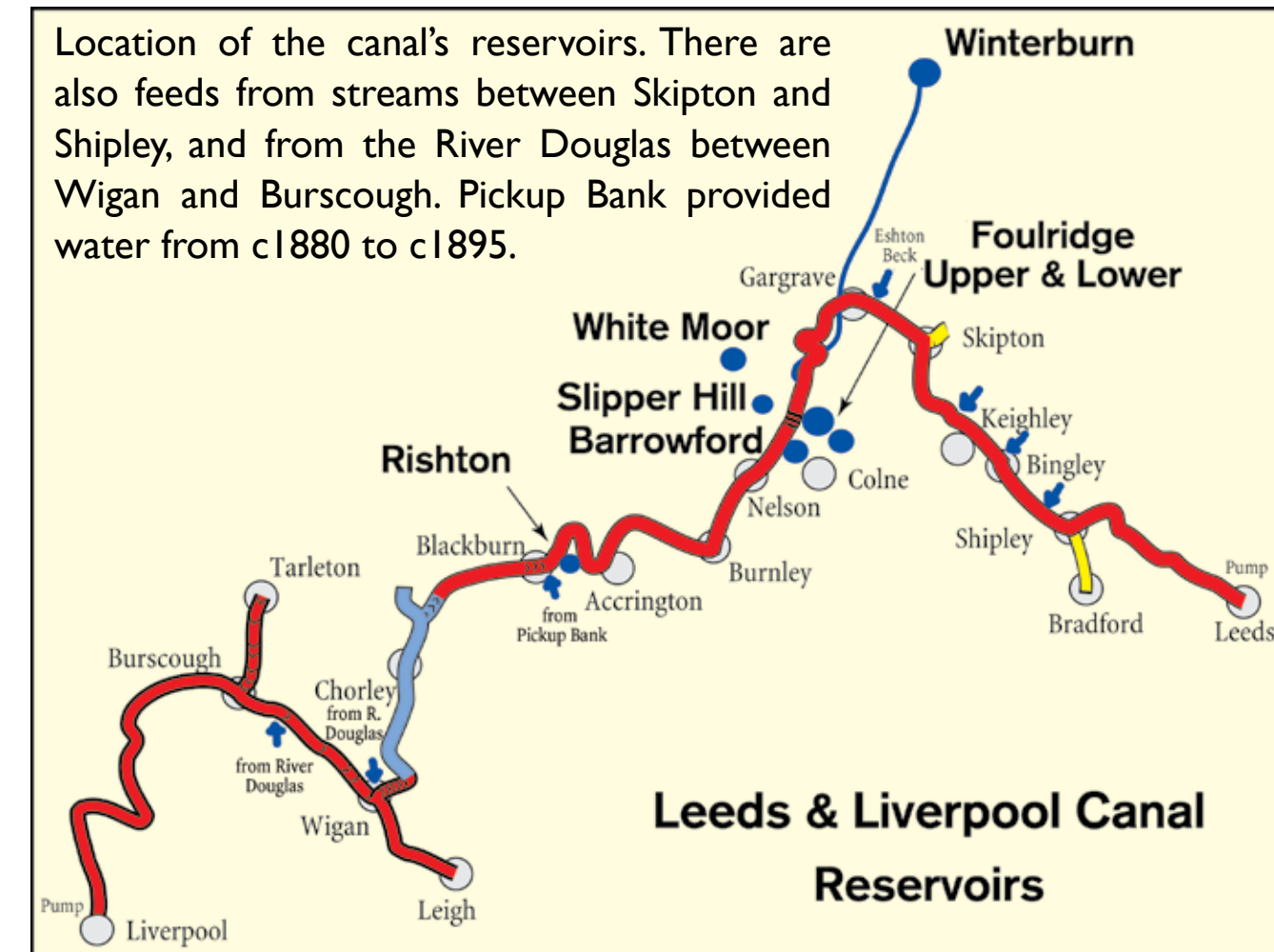
As traffic on the canal increased, more water was needed, with existing reservoirs enlarged and new ones built. The graph shows the number of lockfulls of water that could be stored, compared to the growth of traffic in red. Today's equivalent leisure use is shown by the green line.



Land drainage provides some of the canal's water supply. Here a stream enters the canal at Dowley Gap via a 'stilling' bason to collect rubbish and silt.



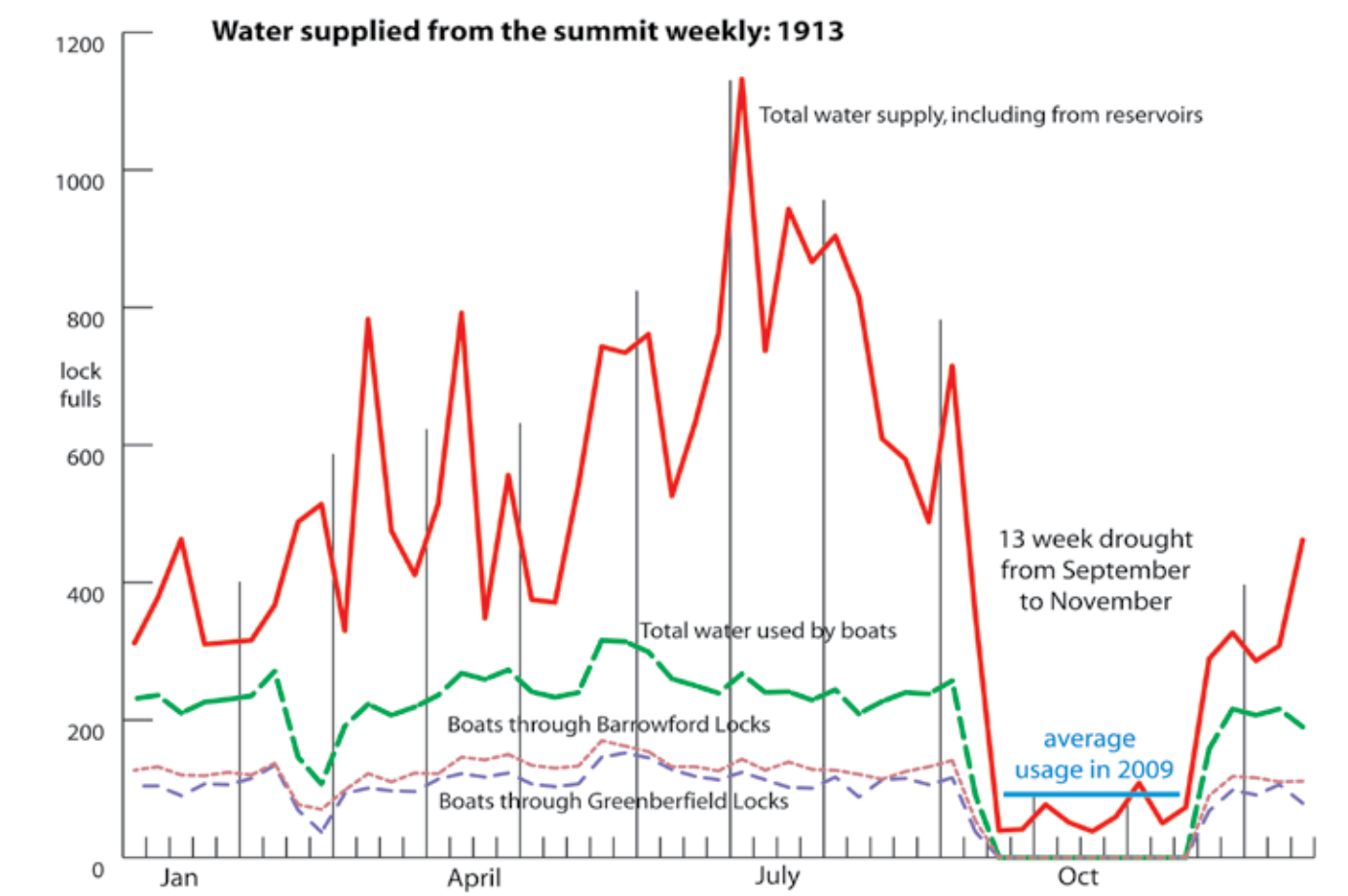
County Brook carries the water supply from White Moor Reservoir. It enters the canal on the right, with any excess water returning to the brook via the overflow under the towpath.



The reservoirs are shown here in blue. Winterburn also fed Eshton Beck, which was the main supply for the Yorkshire end of the canal. In the 20th century, there were steam pumps, later electrified, at Liverpool Locks and Leeds basin.

## Leeds & Liverpool Canal Reservoirs: a chronology

- 1796 Foulridge & Slipper Hill originally built as temporary reservoirs.
- 1814 Foulridge raised.
- 1828 Rishton built to supply water for the Lancashire section of the canal.
- 1834 Foulridge raised again.
- 1840 White Moor built to supply the summit.
- 1854 Rishton raised.
- 1865 Foulridge Upper built to supply the summit.
- 1885 Barrowford built to store excess water from the summit for the Lancashire section of the canal.
- 1891 Winterburn built, originally to supply the Yorkshire section of the canal.
- 1893 Pipeline from Winterburn built to supply the summit at Greenberfield.



This graph shows the water supplied to the canal during the drought year of 1913. The red line shows all the water fed into the canal, with the green line showing that used by boats. For comparison, the solid blue line shows the water needed for boats passing through locks today.

Foulridge Wharf was where weekly records were compiled, showing how much water had been used and how much was in store. Water came not just from reservoirs, but also from streams feeding into the canal. It was estimated that up to twelve locks-full daily came from ground water leaking into Foulridge Tunnel. The summit level was built deeper to provide an extra supply.

Few boats passed over the summit level, the main traffic being between Liverpool and Blackburn and Burnley, and between Leeds and Bingley. Water had to be provided for traffics lower down the canal, and for evaporation and leakage which could amount to a third of the total water used.

On the right is the old water supply recorder for Winterburn. Compensation water, to keep Eshton Beck full, was regulated by the weir, seen below, with the pipeline to Greenberfield starting in the small stone house at the base of the reservoir's dam.

