

Geography report

Jane Harrison

The Industrial Revolution led not only to canal and railway building mania but also to reservoir building mania. We discovered this from our speaker, Ian Royston, who explained that in the Pennines alone, over 200 reservoirs were built between 1840 and 1970.

Reservoirs and aqueducts were first built in Britain by the Romans. Much later reservoirs were built to ensure adequate water levels in flights of canal locks. It wasn't until the mid-19th century, however, that local authorities were under any legal obligation to provide potable water and sewerage. Change followed Sir Edwin Chadwick's report in 1840s which linked poor sanitation to disease and led to the first Water and Public Health Acts.

Demand for water for industry and growing populations led large cities, such as Manchester, to purchase land in upland valleys for building reservoirs. The chain designed and constructed in Longdendale, in the Peak District, by John Frederick Bateman, is one example.

From 1849, water was abstracted from the river Tees, at Broken Scar, near Darlington, to supply towns downstream. Supplies soon proved inadequate and water quality was poor. James Mansergh, who designed the dams in the Elan valley, in mid-Wales, was commissioned to design a scheme for reservoirs in Teesdale but it was the charismatic George Yourdi who oversaw Hury, completed in 1892 together with a pipeline to supply Lartington treatment works and thus Barnard Castle. Blackton and Grassholme followed although their purpose was to compensate for abstraction at Broken Scar.



Photograph by Ian Royston. Blackton reservoir with Hury in the distance

The steel and chemical industries on Teesside increased the demand for water in the 1950s. This led to the building of Baldersdale and Selsset reservoirs. Cow Green, initially considered too difficult a location, was given approval in 1966 and completed in 1971. It too regulates flow on the Tees. More recently the Tees and Central Strategic Pipeline has been completed, taking treated water directly from Lartington to urban areas further east.

Kielder reservoir, in Northumberland, is also a regulating reservoir. Water is abstracted downstream at Riding Mill from where pipelines running south help to maintain flows on the Derwent, the Wear and even the Tees. Although it is tested regularly, water from the Tyne has only once topped up flows at Eggleston.

Although the heyday of reservoir construction has passed, new reservoirs are being built in the 21st century. These include the Havant Thicket Reservoir in Hampshire (2029), the Fens reservoir (2036) and the Lincolnshire reservoir (2040).

Next meeting: Thursday 16th April. The Witham. 2pm. Speaker to be confirmed.