

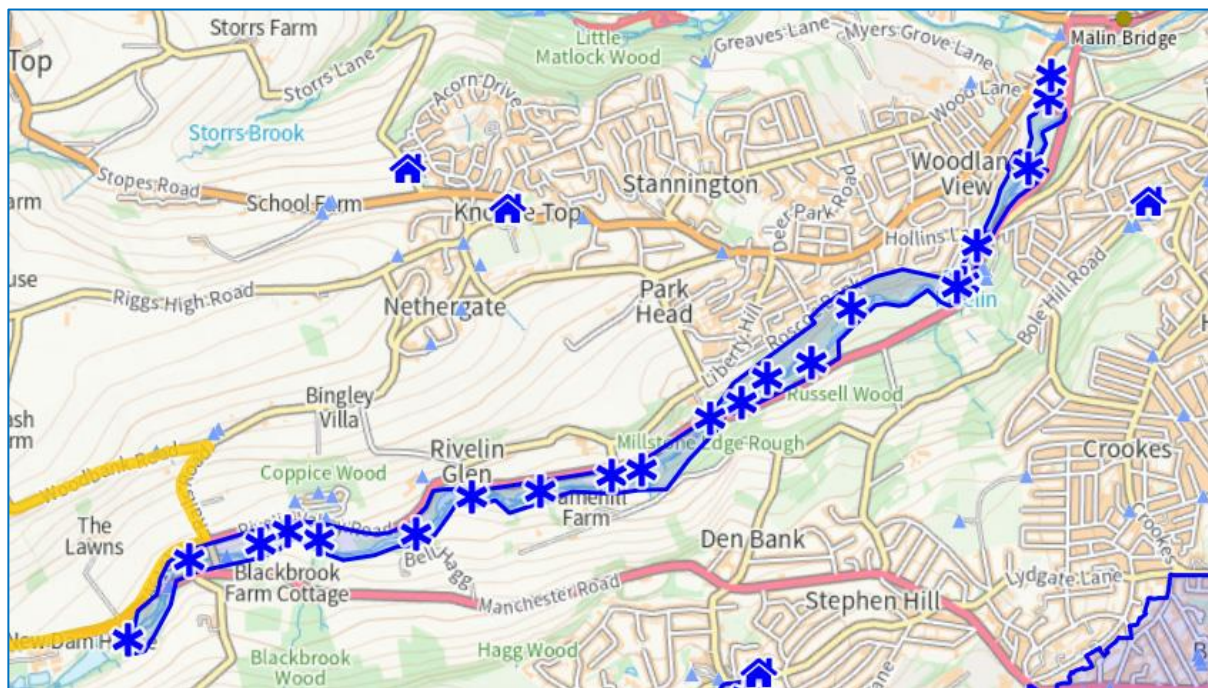
Rivelin Waterpower Sites
South Yorkshire Local Heritage List entry, August 2022
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<https://local-heritage-list.org.uk/south-yorkshire/asset/7907>

All the Rivelin watermill sites are now formally listed on the South Yorkshire Local Heritage List, both individually and as a group. The map and full listing for the sites as a group is given below. Listings for the individual sites can be seen via a list or an interactive map.

<https://local-heritage-list.org.uk/south-yorkshire>

<https://local-heritage-list.org.uk/south-yorkshire/map>



LOCATION/ADDRESS

Extends from 300m above Rivelin Mill Bridge to Malin Bridge, Rivelin Valley, Sheffield

DESCRIPTION

The lower Rivelin Valley forms part of a green corridor along the River Rivelin stretching from the urban area at Malin Bridge out into the Peak District, dividing the communities of Stannington to the north, and Walkley, Crookes, Crosspool and Lodge Moor to the south. About 3½ miles (5.6 km) of the lower Rivelin Valley were host to a significant sequence of 20 water-powered mills and 21 mill dams, possibly the greatest density of mills over that distance in Britain. Six of the mills were built before 1700, with a further 14 being built in the first half of the 18th century. Only one, New Dam, was built in the 19th century (1853). This sequence of Rivelin mills and mill dams forms an essential part of Sheffield's heritage, and cutlery trade in particular, helping to tell its story from origins in rural workshops with water-powered grindstones. They also have a broader national and even international significance in relation to the history of the Industrial Revolution in Sheffield. Apart from Uppermost Wheel, the furthest upstream of the 21 sites, historic remains of all of the others can still be seen and together they form a sequence along the valley that should be preserved in its entirety.

Each individual waterpower site is an asset consisting of all remains relating to water power, water management and associated human activity. These include (but are not limited to) head goits, tail goits, overflow masonry and channels, shuttles and other mechanisms, weirs, forebays, pentroughs, wheel pits, and channels (including the river). Also included are land, buildings and structures housing machinery or relating to the processes carried out at the site. In general, each asset extends from the furthest point upstream where water is taken from the river or another water management system to the furthest point downstream where water re-enters the river or enters another water management system. Individual sites have been created as separate assets, each of which includes 'Rivelin Waterpower Sites' in its description.

The mills, workshops and forges in the Rivelin sequence supported a wide variety of trades, such as grinding and finishing blades of various types, optical glass grinding, paper making (from rags), corn milling, lead smelting, forging metalwork (including the world-famous anvils from Mousehole Forge), wire drawing, and making metal strips for corsets.

The majority of the buildings had been demolished by the 1950s, but uniquely amongst the Sheffield rivers, only three mill dams were infilled or built on. Most of the weirs still function, but are in various states of repair. The most extensive remains can be seen at Mousehole Forge (a Scheduled Ancient Monument with a Grade II listed workshop), which for at least a century was the only works in the world where anvils were made commercially for export, particularly to America. Four of the twelve bridges along the lower Rivelin Valley (Hollins Bridge, Roscoe Bridge, Packhorse Bridge, Rivelin Mill Bridge) are also Grade II listed.

A marker post installed at each site by Rivelin Valley Conservation Group gives a brief history and has a QR code linking to a website (<https://rivelinvalley.org.uk/rivelin-trails-2/>) where further information and pictures can be found. See also the books 'Walking the Rivelin', by Sue Shaw and Keith Kendall (6th edition, 2019, Rivelin Valley Conservation Group), 'Water Power on the Sheffield Rivers', by C. Ball, D. Crossley, N. Flavell (Editors), (2nd Edition (2006), South Yorkshire Industrial Society).

A continuous nature and heritage trail weaves between the ruins for some 5 kilometres (3 miles), passing through woodlands and pastures that are also important for wildlife. It has open access for public recreation and attracts many Sheffield residents and visitors from outside the City, for informal recreation, education and research.

The valley-bottom area has been designated 'Rivelin Valley – City Heritage Park' and is managed and maintained by the Sheffield City Council Parks and Countryside Service. Much of it (excluding allotment areas) has also been designated as a 'Local Wildlife Site'. Rivelin Valley Road, which runs along the valley bottom, was built in about 1906 and lined with over 700 lime trees, possibly the longest lime tree avenue in Britain. The Park can be accessed from various points along Rivelin Valley Road, or from the north (Stannington) side of the valley.

A popular café is situated near a children's playground and the 'Rivelin Valley Water Play', which was refurbished in 2013 from the 1950s paddling pools.

STATEMENT OF SIGNIFICANCE

Age

At least one (potentially three) of the waterpower sites existed in 1581. Six existed by 1700, with a further 14 being built in the first half of the 18th century. Only one, New Dam, was built in the 19th century (1853). In most cases, underground remains are likely to include some dating from the origins of the site. Above ground, major structures such as dam walls, forebays and wheel pits may be largely original, as may be watercourses. Buildings and mechanical structures which survive in

relatively small numbers may have been modified or replaced over time, although some will retain original fabric.

Rarity

Waterpower sites were once commonplace throughout Europe, but have almost always been built over and destroyed. Sheffield was always unusual in having both a local industry that needed a large number of powered sites (rather than being confined to isolated traditional uses such as corn mills) and multiple fast-flowing streams with significant falls capable of supporting many closely-spaced sites. It is likely that by the mid-18th century Sheffield's river valleys made up one of the most heavily industrialised areas in Europe. The survival city-wide of identifiable remains of the great majority of the sites is extremely rare, and potentially unique. Rivelin is an especially rare survival, because inaccessibility and limited building land ensured that as industry expanded it moved elsewhere, and as a result clearly visible and identifiable evidence survives of all sites except one, with many water management structures intact. Only at Uppermost Wheel is significant effort needed to identify remains.

Architectural and Artistic Interest

Waterpower sites use specialised masonry, landscaping, ironwork and other architectural techniques in a variety of ways to adapt or exploit topography and natural landscape features and provide power using the locally characteristic bypass system, while managing water levels so as to satisfy competing interests. The sites collectively and individually demonstrate the construction techniques used for various elements including weirs, dams, forebays, wheel pits and overflows. These elements must be designed not only to inter-operate within a single site, but to manage the interface with adjacent sites. The river itself forms part of the record. Even where a river channel appears natural, the level of the bed has been set artificially in accordance with the weirs above and below. The Rivelin is best seen as part of an incrementally-created, contiguous, city-wide, man-made water management system that extends over a network of many miles and survives to a remarkable degree.

Group Value

Each site makes a contribution to the overall group, providing an unusually complete picture of the role of waterpower in industrial development over time, and its subsequent decline once the needs of industry exceeded its capacity. It is only possible to understand fully the role and impact of waterpower in Sheffield by observing the number, density and interdependence of the sites. This group value not only persists amongst the assets on the river, but extends to the waterpower sites on other rivers in the city.

Historic Interest

Sheffield's river valleys and their historic infrastructure of dams, weirs and artificial channels are central to the city's identity. The fast-flowing rivers and the ingenious ways in which they were put to use to power our industries made the city's reputation and fame. The Sheffield Waterways Strategy, to which Sheffield City Council is a signatory, describes Sheffield's river valleys and their complex system of man-made infrastructure as a globally important place, worthy of UNESCO World Heritage status.

In their assessment of the buildings of the metal trades, English Heritage listed various natural advantages of the area, but gave primacy to the "steeply falling rivers" (One Great Workshop (2001), p5). Their importance is absolutely central, and without them Sheffield as we know it today would not exist. It is hard to imagine any other historic remains that so completely encapsulate the significance achieved by any city, and few have been so important in shaping a people and their culture or have led to such a lasting and comprehensive impact on the modern world.

A few corn mills are of mediaeval origin, but metal trades are known to have begun using water power by 1496. By 1581 there were at least 14 such sites, and by the end of the 17th century there were 63 sites in operation, almost all in the metal trades. A massive expansion occurred in the 18th century, when the number of water-powered sites on the Sheffield rivers and their tributaries rose to 138, with a density of about four mills per mile of river. Thereafter, waterpower and sometimes the sites themselves were gradually abandoned. Only a few waterwheels remained in use in the 20th century. The last commercial use of waterpower was at Wilson's snuff mill on the Porter, which continued until at least 1989, and where the wheel is still in working order.

It is important to see the Rivelin Waterpower Sites in the context of the water-power infrastructure of the city as a whole. No usable length of any of the city's five main rivers or their tributaries within a reasonable distance remained untapped. Exploitation ranged from the massive 8-wheel installation on the bypass system at Beeley Wood on the Don to the tiny valley-fill pond of Forge Dam on the upper reaches of the Porter. The Rivelin, a steep-sided valley, cut off from the urban centre by high ground, illustrates a particular phase of development. 14 of the 21 dams were not developed before the 18th century, and about two miles of stream above Uppermost Wheel remained unused. The almost complete abandonment before the middle of the 20th century also contrasts with the other more accessible rivers.

The Rivelin also provides a catalogue of the uses to which waterpower sites could be put (see description) and thereby a physical record of wide variety of metal and other trades in Sheffield. Sites may even have specific characteristics relevant to their use, for example the separate blower wheel at Mousehole Forge or the feed of cleaner water from the Blackbrook for paper-making at Third Coppice Wheel. The sites, their configuration, location, and communication routes from residential areas and facilities such as pubs also provide a physical record of the lives and trades of working people.

All but two sites were on Norfolk estate lands, resulting in an especially full archive record until they were sold off during the first half of the 19th century. Most passed to the Sheffield Water Company in the mid 19th century, when the Rivelin reservoirs were built, meaning that the archive record continues. The sites therefore also illustrate the practice and policy of both landowners.

Archaeological Interest

All sites have the potential for underground remains that with further investigation could reveal their development over time, including changes of use and the evolution of industrial processes and construction techniques. Because the sites were not overtaken by later industrial development, any remains are likely to be relatively intact.

Landmark Status

The Rivelin Valley is an extremely popular leisure destination for local people, especially walkers, and is well-known not merely as attractive countryside but as being a place in which waterpower and waterways are a defining characteristic. Many of its dams remain in water, and are much-photographed, as is the course of the river. It is also an important landscape feature in the wider city, being highly visible as a green corridor projecting into the urban area. The fact that it is unlit means that it retains its prominence at night.

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