

Ashop River Capture Geocross V80

Ashop River Capture, , a clever bit of reservoir engineering completed 96 years ago

The Derwent Valley Water Board was formed by Act of Parliament in 1899 to construct new reservoirs to supply the growing cities of Nottingham, Derby, Leicester and Sheffield. Howden Reservoir opened in 1912 and Derwent Reservoir in 1916. Water passed by pipeline to the Bamford Water Treatment filtration works at Yorkshire Bridge, then by the Derwent Valley Aqueduct to cities lower down the Derwent Valley. But by the 1920s the water supply was found to be inadequate to meet the rising demand.

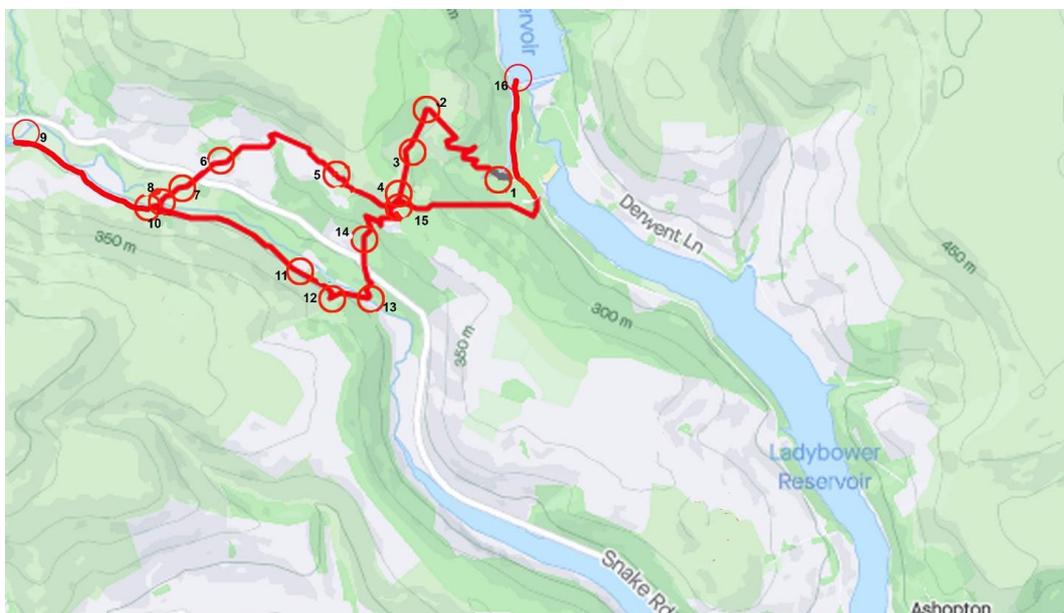
The capture of water from the River Ashop was an important and clever engineering strategy of the Derwent Valley reservoirs project, and was completed in 1928. It significantly increases the catchment of the Derwent Reservoir, by adding rainwater from over 6000 hectares in the Ashop valley, thereby providing more water for the cities long before the third and largest reservoir, the Ladybower, was built.

Not many people are familiar with all the water engineering works of the Upper Derwent Reservoirs.

The River Ashop Capture is one of several schemes which increase reservoir water availability Others are the River Noe Capture, the Jaggars Clough Capture and the Limestone water schemes.

This Ashop River Capture Geocross V80 visits some of the visible parts of this water engineering scheme.

Each of the locations can be found on the route below. The locations are listed in order and sufficient background is included to help you triangulate your position to identify the location



Start from Fairholmes car park.

Location 1 OS ref SK 17146 89209

Ashop conduit

W3W report.comply.tiles



The Ashop Conduit is an engineered system of pipes, tunnel and concrete lined gravity fed channel which delivers the River Ashop Capture water under Hagg Side, and into the Derwent Reservoir..

This part of the conduit has just emerged from the 975 metre long, 1.8 metre diameter tunnel beneath Hagg Side. In times of high flow the channel is brim full and the torrent is rushing to leap into the Derwent Reservoir 100 metres above the dam wall.

Location 2 OS ref SK 16561 89635

Lockerbrook packhorse trail

W3W squish.conductor.change



Lockerbrook Farm was an important place for hundreds of years on a packhorse trail which led up and over the high ground above the often flooded Derwent Valley to northern destinations. Turning off the Snake Road past Rowlee Farm or Hagg Farm cuts a lot of distance off the journey.

The packhorse trail now serves mountain bikers and walkers.

Location 3 OS ref SK 16477 89419

Lockerbrook Farm

W3W lucky.blown.carry



The present day Lockerbrook Farm was built in 1756 and would have served refreshments to packhorse trail users for 150 years. When the Derwent Valley Reservoirs project began it was bought up and emptied by the Derwent Valley Water Board. All habitable buildings within the water catchment of the Howden and Derwent Reservoirs suffered the same fate.

When the policy of 'no habitation within the water catchment' was abandoned the farm was restored in 1964 by volunteers and became an Outdoor Activities Centre. It has magnificent views over the Ladybower Reservoir.

Location 4 OS ref SK 16379 89067

Haggtor crossroads

W3W cope.tagging.disengage



Historically an important junction of bridleways. One continues north-south along the high ground, north to Alport Castles and Westend, and south towards Derwent and Ashopton. These two trails lead down into the Ashop Valley, one passing Rowlee Farm and the other Hagg Farm.

Location 5 OS ref SK 15991 89246

Bellhagg Barn gate

W3W windpipe.mega.abstracts



Bellhagg Barn is a traditional stone walled and stone roofed barn. The lower wing has windows and a door and would have provided living accommodation for a farmworker, probably the shepherd.

It is perched high on the hillside just below the open moor of Alport. Above the track the sheep would wander freely over the moor. In severe weather the sheep would search out shelter behind stone walls below the moor, but the shepherd would try to rescue any which became snowed in.

A local shepherd is thought to have carved the alphabet and numbers onto the nearby Alphabet Stone in the early 1800s. He taught local children from the nearby farms and was able to keep an eye on them from the windows of Bellhagg Barn when he had other tasks to carry out.

It was used as a Sunday School in the early 1800s.

Location 6 OS ref SK 15375 89331

Rowlee Farm - gate

W3W goggles.denoting.conclude



This rebuild of Rowlee Farm has a date stone of 1849. The ill-positioned weeping ash tree spoils an otherwise grand frontage. The farm sits by the well-used packhorse trail leading to Lockerbrook and Derwent

Location 7 OS ref SK 15365 89326

Rowlee Low Barn

W3W surveyors.arch.marzipan



Rowlee Low Barn was built in 1865. This is stone with a slate roof. The one storey L shaped building has doors and windows and was probably used for farm workers accomodation and stables. Now abandoned, but this fine building was constructed to a high standard and was meant to last.

Compare this with the modern crinkly tin industrial size barn of many moorland farms. I think both Bellhagg Barn and Rowlee Low Barn are more respectful of their place in the Peak District landscape

The road over Snake Pass connecting Sheffield to Glossop was very rough. At Rowlee Bridge travellers split to go east to Sheffield or over the bridge and head south uphill and over Hope Cross and on to Hope. The Romans crossed here to connect their forts at Glossop and Brough.

Location 8 OS ref SK 14959 89326

Rowlee Bridge

W3W stirs.price.puffed



Before the A57 road was improved and became a turnpike toll road in 1818, this was an important crossing of the River Ashop taking packhorses and carts over Hope Cross and on to Hope.

Rowlee Bridge has substantial stone pillars, build to withstand the turbulence of a flooded River Ashop, trundling gritstone rocks along its bed.

There are few bridges over the River Ashop. They need to be very high because the river volume increases dramatically after rain. There are three footbridges, and a forestry bridge further north.

Location 9 OS ref SK 14089 89422

River Ashop Capture

W3W dislodge.strut.monopoly



Just before the River Ashop is jointed by the River Alport the clever capture takes place. Some of the River Ashop water escapes left through a weir and the captured water is led right into a short tunnel.

The captured water then enters a gently falling concrete channel which runs high above the descending bed of the River Ashop. Water then passes through a filter grating and then drops down into a gravity fed siphon with a pipe bridge over the bed of the River Ashop. The siphon pressure pushes the water up the other side, then through a 1.8 metre diameter 975 metre long tunnel beneath Hagg Side, then into another open concrete channel which discharges the captured water into the Derwent Reservoir, above Fairholmes.

The Ashop riverbed upstream is heavily silted as the river becomes constricted. The weirs collect a lot of floating branches and need a lot of 'hands-on' day to day attention. Most of the overflow water enters the Ashop conduit, and an aside exit allows surplus water to be returned to the Ashop river channel. The River Alport joins what remains of the River Ashop within 100 metres of the weirs.



From the point of the River Ashop Capture the river continues to descend until it flows into Ladybower Reservoir which was completed in 1945. But by the time the river water has descended another 4 km it has become too low to flow by gravity through the Bamford Water Treatment Works and down the Derwent Valley Aqueduct to supply water to Derby, Nottingham and Leicester. There is provision to pump the water uphill but this requires a lot of expensive electricity, Most of the Ladybower Reservoir water goes into the River Derwent.

Location 10 OS ref SK 14895 89038

Ashop conduit bridge

W3W buyers.commenced.demanding



The River Ashop is 'captured' just above the junction with the River Alport; water follows in a concrete channel which drops down into a gravity fed siphon with a pipe bridge over the bed of the River Ashop.

The remaining water of the River Ashop now flows into the Ladybower Reservoir, which was completed in 1945.

Location 11 OS ref SK 15817 88625

Ashop conduit grating

W3W village.butchers.sweetened



The river channel has steep sides and any sheep unlucky enough to fall in eventually end up here on the filter grating.

Location 12 OS ref SK 15987 88503

Deep chamber

W3W clouding.procured.panting



This stone chamber has a ladder and locked manhole cover on top. Part of the River Ashop Capture Siphon, incorporating a spillover for excess water to be returned to the River Ashop.

Location 13 OS ref SK 16219 88469

River Ashop bridge

W3W walked.sings.trembles



Haggwater Bridge is the last crossing point over the River Ashop before the Ladybower Reservoir. It is built high above the river because very high volumes of water are carried after rain, and lesser bridges have been washed away.

Usefully sited for mountain bikers who are probably the bulk of users. There is an electronic monitoring station in place on the left railings.

Location 14 OS ref SK 16178 88836

Hagg Farm

W3W respects.stockpile.cautious



Hagg Farm has been a Nottinghamshire County Council Outdoor Activities Centre since 1989.

In a previous life Hagg Farm, like nearby Rowlee Farm, would have served refreshments to packhorse trail users.

Location 15 OS ref SK 16376 89059

Hagg Side footpath stile

W3W printout.ponies.coast



This stile leads to an alternative descent to Fairholmes car park, and is not shared with mountain bikes.

Location 16 OS ref SK 17091 89853

Derwent Reservoir River Ashop Capture outfall

W3W feast.factoring.ranked



The Ashop Conduit delivers 'captured' water from the River Ashop into the Derwent Reservoir (not the Ladybower). The Derwent Reservoir delivers water to Sheffield via the Rivelin Tunnel, and to the Bamford Water Treatment Works for aqueduct pipeline gravity flow to the cities of Derby, Nottingham and Leicester, In the 1920s the Derwent Valley Water Board devised this means of increasing the flow of water into the Derwent Reservoir, before the lower Ladybower Reservoir was built.