

## Changes after removal

We expect the removal of Bowston weir to change the form of the River Kent SSSI/SAC. The weir has impounded the river and removal will allow the river to flow again after 150 years. Over time it will form into a natural lakeland river, with pools and riffles, which are fantastic habitat for a range of species.

During the on-going works, and especially with low summer flows, there will be some disruption to the aesthetics of the site. However, with time the river will find its own equilibrium and become the natural river it once was.

A stile that was situated on the public footpath, on the left-hand bank, is due to be removed for improved accessibility. Fencing will also be installed along the footpath to keep livestock out of the river, further aiding improvements to river habitat.

## Potential disturbance

There is a footpath diversion in place throughout the duration of the works.

Works are permitted between the hours of 8:00am – 5:00pm Monday to Friday and 9:00am-1:00pm Saturday.

Heavy machines are being used on the project. Stone will be chipped away during the weir removal and large boulders will be sited in the river. Please keep an appropriate distance to avoid injury.

**‘Bowston weir removal project will allow the river to renaturalise, provide a flood risk benefit, improve fish migration, navigation and provides a 44% biodiversity net gain.’**



# BOWSTON WEIR REMOVAL PROJECT



South Cumbria Rivers Trust are a small charity aiming to protect, enhance, monitor and rehabilitate the aquatic environments of South Cumbria. We are the lead organisation for river restoration on the River Kent SSSI/SAC.



**South  
Cumbria  
Rivers  
Trust**

## Bowston removal process

Bowston weir removal will take up to 6 weeks to complete. Dependent on river conditions, this may take longer. Our in river working period is mid-June to the end of September.

There is a set process to the removal of Bowston weir and associated works. The first step is to install a rock rapid below the weir to act as a hydraulic control. The weir will then be removed in stages to ensure that silt liberation is minimised. The rock rapid will be infilled with smaller stone and graded into the upstream level, where the river will then be allowed to form naturally over time.

### Expected stages

Week One – Mobilisation

Week Two – Forming the base of the rock rapid downstream of the weir

Week Three – Removal of the weir

Week Four & Five – Infill the rock rapid with finer material and regrade the riverbed

Week Six – De-mobilisation and depart

Dependent on river conditions, stages of the removal process may occur over several weeks.

## What will happen during the works

Large boulders will be installed on the riverbed downstream of the weir, these form the base of the rock rapid. Toe protection is also added downstream, which protects the wall downstream on the right-hand bank. The weir will then be removed, one notch at a time. Notching will initiate de-watering, where water will start to lower behind the weir, forming a natural river channel.

After the weir is fully removed the rock rapid will be built up to the bed level above the weir to ensure a continuous gradient throughout the stretch. Smaller boulders will be placed between the large boulders of the rock rapid. We will infill the smaller boulders using fine gravel from above the weir.

### Silt control measures

Silt curtains are sited downstream of the weir. Two telemetered sondes that report turbidity levels at 15-minute intervals have been deployed, one above and one below the weir. Additional optical turbidity measurements are also taken every 15 minutes by our contractors. If turbidity levels reach a pre-set trigger limit, works are stopped immediately and don't restart until levels have fallen.



## Machines

Large, tracked vehicles are authorised for in-river use during all phases of the weir removal. Bed disturbance and silt liberation, although minimised where possible, are unavoidable. These machines are essential for this type of work, we apologise for any noise disturbance or any inconvenience caused during these permitted working hours.

## Ecologist

A professional and licenced ecology team will be on site during key stages of the removal. This is to carry out necessary checks and species rescues, if required.



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Contact: [admin@scrt.co.uk](mailto:admin@scrt.co.uk) for further information

