

Stones have broken away from the weir, leading to its structural deterioration. Photo: Aecom



### **Bongate Weir response form**

Once you have completed the form, please cut it out, put it in an envelope and

Post it (with correct postage added) to:

Bongate Weir Group, c/o Eden Rivers Trust, Dunmail Building, Newton Rigg College, Penrith CA11 0AH

OR

Place it in the "Bongate Weir Removal" response form box in Appleby Library or Appleby Tourist Information Centre.

Responses must be received by Friday 21st February 2020.

### **Bongate Weir Drop-in Public Event**

### Wednesday 29th January 2020 12pm to 7pm Appleby Public Hall

- Talk to members of the Bongate Weir Group about the proposal to remove the weir,
- Find out how you can get involved with helping us to create materials to mark the existence of the weir,
- Share your weir stories and photos.

There will be a short presentation and Q&A session at 12.15pm and 6pm.

#### Can't attend the event?

You can share your stories about the weir and let us know your thoughts about the proposal to remove the weir online.

Visit: www.edenriverstrust.org.uk/bongate-weir

#### The Bongate Weir Group

The Bongate Weir Group is made up of Cumbria County Council, Eden District Council, Eden Rivers Trust, the Environment Agency and Natural England.

We are working with Appleby Town Council and others to identify a permanent solution to both the public and the partner concerns about the risks to people's safety posed by the weir.

The group believes that full removal of the weir is the only viable permanent solution.











## **Bongate Weir, Appleby**

# Proposal to remove the damaged structure in 2020

Bongate weir on the River Eden currently poses a significant risk to the safety of river users.

An independent structural assessment of the weir carried out in 2019 found it to be in poor condition.

Parts of it are unstable and in danger of collapse. There are also large holes in the weir and dangerous currents in the pool below.

Since 2001, there have been two serious accidents involving children getting stuck in the weir.

Concerns have been raised by the public for something to be done to make it safe.

#### Weirs are unsafe places

Weirs are structures built by people to disrupt the flow of water and change the height of the river.

Many were built in the 18th and 19th centuries to either power mills (such as Bongate weir), raise riverbed levels, redirect water courses or purely for ornamental reasons.

Nowadays, many of these are redundant and falling into disrepair and can be a liability and maintenance issue for their owners (if they can be identified).

Even when they are in good condition, weirs are dangerous places to swim, boat or paddle. They often have deep water and fast-flowing currents.

Currents circulating at the bottom of the weir can pull a person back towards the weir and under the water.

If they are falling into disrepair, they may also have obstacles hidden under the water.

#### **About Bongate Weir Group**

Several local organisations, also concerned at the risk to public safety posed by the weir, have formed a group to identify a permanent solution.

Members of the Bongate Weir Group (BWG) include Cumbria County Council, Eden District Council, Eden Rivers Trust, the Environment Agency and Natural England.

They have been working with Appleby Town Council and others to understand the issue and find a solution.

The group analysed all possible options and concluded that only full removal of the weir would remove any possibility of future accidents involving the weir's structure.

If the weir is not removed, the only option is to leave it to deteriorate and eventually collapse.

Turn over to find out why full removal is the only viable solution:



### **About the weir**

Bongate weir (also known as Appleby and Jubilee weir) on the River Eden in Appleby is located near to Jubilee bridge. It is 81.6m long, 7m wide and has a maximum height of 1.4m.

The visible parts of the weir probably date from the 18th/19th century, with modern repairs.

To help understand the historical context, the impact on flooding and the structural integrity of the weir, the Environment Agency commissioned three reports. Here is a summary of the findings:

#### Structural (Bridgeway Consulting Ltd.) 2019

The left-hand bank (Castle side) is in relatively good order though water overtops in some locations.

In the centre, the weir is being undermined by the pressure of water channelling around and below the broken fish pass. As a result, a large amount of stone is washing out, creating large, dangerous voids.

The broken pieces of the concrete fish pass are now scattered around the bed.

On the right-hand bank (Bongate Mill side) of the weir, the concrete on the weir crest (from previous repair works) is extensively cracked and sections are missing. Water is seeping through where reinforcing mesh is exposed.

Fast-flowing water is being sucked through a number of small holes in the weir.

#### Hydromorphic Assessment (Aecom) 2018

Removal or modification of the weir will have no discernible impact on local and downstream flooding.

### Heritage assets and their significance (Durham University) 2018

By the 19th century, the weir was recorded with the Grade II listed Bongate Mill.

The weir was connected to a sluice gate at the north end and was used to channel water to power the mill wheels.

The mill (and by association, the weir) was listed in 1951 but by this time the mill was no longer in use, the wheels removed and the weir redundant.





Above/bottom left: Middle of the weir washed away and broken pieces of the fish pass scattered downstream. Photo: O Southgate



One of the underwater voids showing water being sucked in.

#### Who owns the weir?

The weir ownership is split between two landowners. Only one owner is known but the Group is searching for the other one.

None of the organisations that make up the Bongate Weir Group have a statutory responsibility for the weir or its ongoing maintenance.

### The case for removal

Full removal of the weir is the only option that offers a long-term solution to:

- The significant safety concerns,
- Fully deal with issues of maintenance, repair and liability,
- Improve the ability of fish and eels to move up the river, and
- Remove fishing restrictions.

If there is public support for the removal of the weir, money has been identified by the Environment Agency as part of the Cumbria River Restoration programme for Eden Rivers Trust to undertake its removal in Summer 2020. It is likely to cost £80,000 - £100,000.

#### What will removal look like?

We appreciate that full removal will mean the loss of an historical structure from the river and town landscape, however, as part of the funding we want to:

- Undertake archaeological surveys to discover the hidden history of the weir, and
- Involve members of the community in a project to record stories about the weir and help create permanent interpretation marking the existence of the weir.

#### What about the landscape?

- The river's appearance will be changed, but the river will quickly look more natural,
- The bulk of the concrete, metal and stone would be taken off site for recycling where possible,
- Depending on the design, some large, rounded boulders may be used in the river channel to create small rapids and riffles.

## What happens if you just leave it alone?

The members of the Bongate Weir Group came together because each organisation feels it has a duty of care to the safety of the public and wants to see a permanent solution to the safety issue.

The group believes that doing nothing is not a responsible option as:

- Safety will remain a major concern: the weir will continue to deteriorate and could collapse potentially causing serious accidents,
- If it collapses, it will remain a safety hazard as sharp pieces of broken concrete and protruding metal bars will be left both at the site of the weir and downstream in the river,
- The historic structure will remain in its damaged form ... until it collapses,
- Public frustration will grow as nobody is doing anything about the safety concerns.

### Why can't it be fixed instead?

There isn't any money available to fix the weir.

Although repairing or partially removing the weir would fix the current damage and keep the feature, it does not address fundamental issues around long-term safety, maintenance and liability.

#### Also:

- Doesn't guarantee that future accidents won't occur,
- The weir may still fall into disrepair over time,
- The initial repair bill will be significantly more than the cost of full removal,
- Repair might mean that the whole structure has to be taken down and re-built - which will be costly and may/may not be historically accurate,
- Even with a new fish pass installed, the weir would still be a barrier to fish movement and fishing restrictions would remain in place.

### What happens next

The Bongate Weir Group would like to find out whether there is public support for the proposal to remove Bongate Weir before submitting a planning application.

You can let us know your views by:

- Coming along to our drop-in information event on the 29th January at Appleby Public Hall (more information on back page),
- Completing the form below, or
- Visiting the Bongate Weir page on the Eden Rivers Trust website to complete an online form.

If the proposed removal goes ahead, we would like to involve the community in producing interpretation about the weir.

If you have a story or information that you would like to share about the weir with us, please sign up at the drop-in event or give us your name and contact details in the form below so that we can contact you at a later stage.

The Bongate Weir Group would like your views on the proposal to remove the damaged and currently dangerous Bongate Weir in Appleby.		
Do you live in Appleby?	YES	□ NO
Would you like to see the weir fully removed? (Please tick one box only)	YES	☐ NO
Please tell us why:		

I would like to share my story/information about the weir. My contact details are:

Name:

Email address:

Telephone:

I give Eden Rivers Trust permission to use the information provided on this form to communicate with me about Bongate Weir stories. Eden Rivers Trust may share your details with other members of the Bongate Weir Group, but only in relation to producing interpretation about the weir.

You can change your mind at any time by contacting office@edenrt.org, or by calling 01768 866788.