CALVER WEIR RESTORATION PROJECT

by Nick Quaife, Project Officer

GREEN COMMUNITIES CONFERENCE
Friday 6TH May 2011
The Nightingale Centre, Great Hucklow

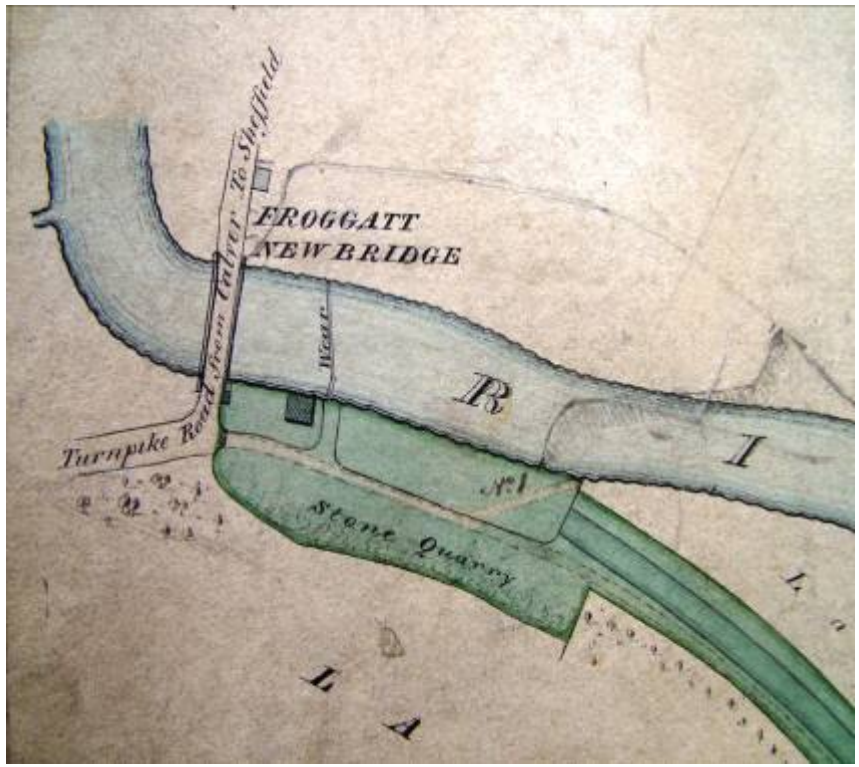
CALVER WEIR RESTORATION PROJECT

location of the project area

CALVER WEIR RESTORATION PROJECT

the mill and the weir

- Calver Weir is a Scheduled Monument, built in 19th century to provide water for cotton spinning at Calver Mill.
- Two earlier weirs, but neither survive.
- Calver Mill ceased spinning cotton in the 1920's, by which time the weir was already in a poor state of repair.
- Gas engine used as auxilliary source of power 1899-1920 (Mackenzie, Derbyshire Archaeological Journal vol. 84, 1964).



CALVER WEIR RESTORATION PROJECT

the restoration project

- In 2004, Calver Weir Restoration Project (CWRP) was formed, with the objective of saving the weir from collapse.
- CWRP acquired the weir from private ownership in 2009.
- Restoration work began in October 2009, and completed August 2010.
- Total cost of restoration exceeds £1.8 million, largely funded by Heritage Lottery Fund, but with substantial contributions from English Heritage, Environment Agency, and PDNPA.

CALVER WEIR RESTORATION PROJECT

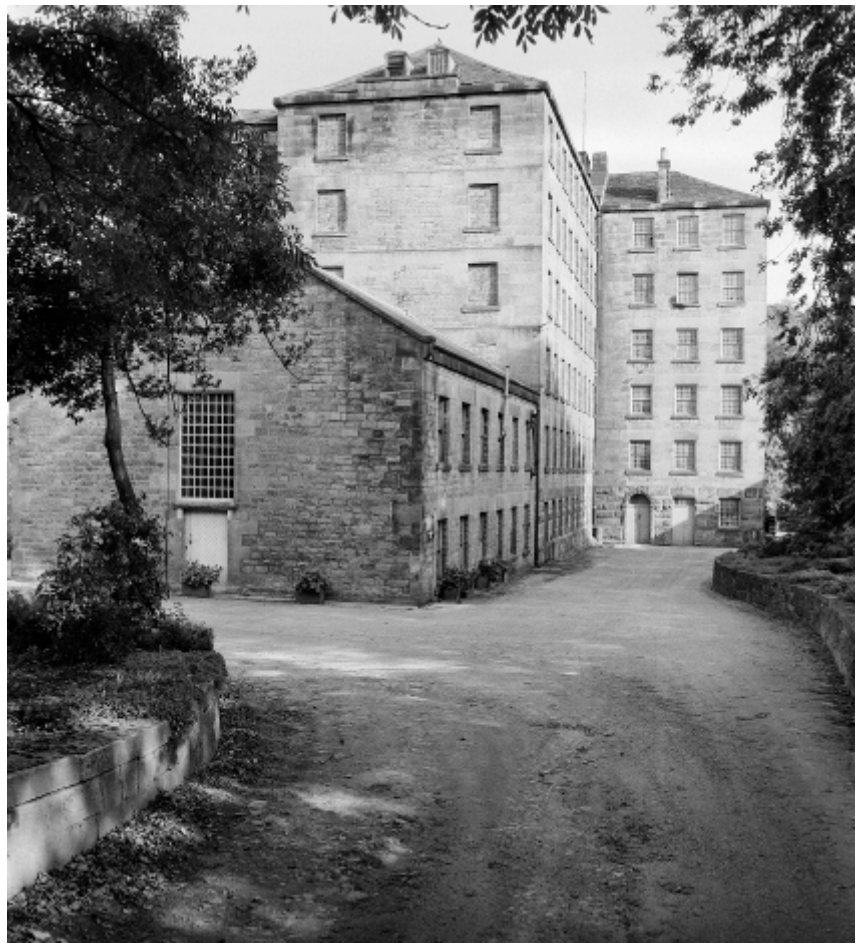
a hydro scheme at Calver Weir?

- Considered early on in process, but focus then was on urgent repair of the weir.
- Advice given by local planning authority regarding what was/wasn't acceptable. LPA awaiting future contact.
- Using the power provided by the dammed-back water obvious route to go if a scheme acceptable to all concerned can be devised!

CALVER WEIR RESTORATION PROJECT

a hydro scheme at Calver Mill?

- Old cotton mill constructed in 1804.
- The water that powered the mill still flows through the site's wheelhouse, which is a potential location for a "micro-hydro" scheme.
- A study of the feasibility of a hydroelectric power scheme at Calver Mill has been undertaken, which suggests that scheme is viable.



CALVER WEIR RESTORATION PROJECT

a hydro scheme at Calver Mill?

Initial feasibility study (Derwent Hydro Scheme Evaluation , A. Higginson, Uni of Notts.) suggests that a waterwheel should be used, with electricity sold to the grid.

A number of option to consider, depending on stakeholder preferences and Environment Agency decisions regarding water abstraction issues….

Capital costs between £92,000 and £132,000

Annual operating profit of between £31,000 and £83,000

Scheme has payback period between 1 and 3.5 years

CALVER WEIR RESTORATION PROJECT

acknowledgements for images used

- *Part of 1833 map showing location of old weir* (slide 2): Sheffield Archives Bagshaw Collection Bag C/675

- *B/W photo of Calver Mill,1956* (slide 5) :Reproduced by permission of English Heritage NMR.