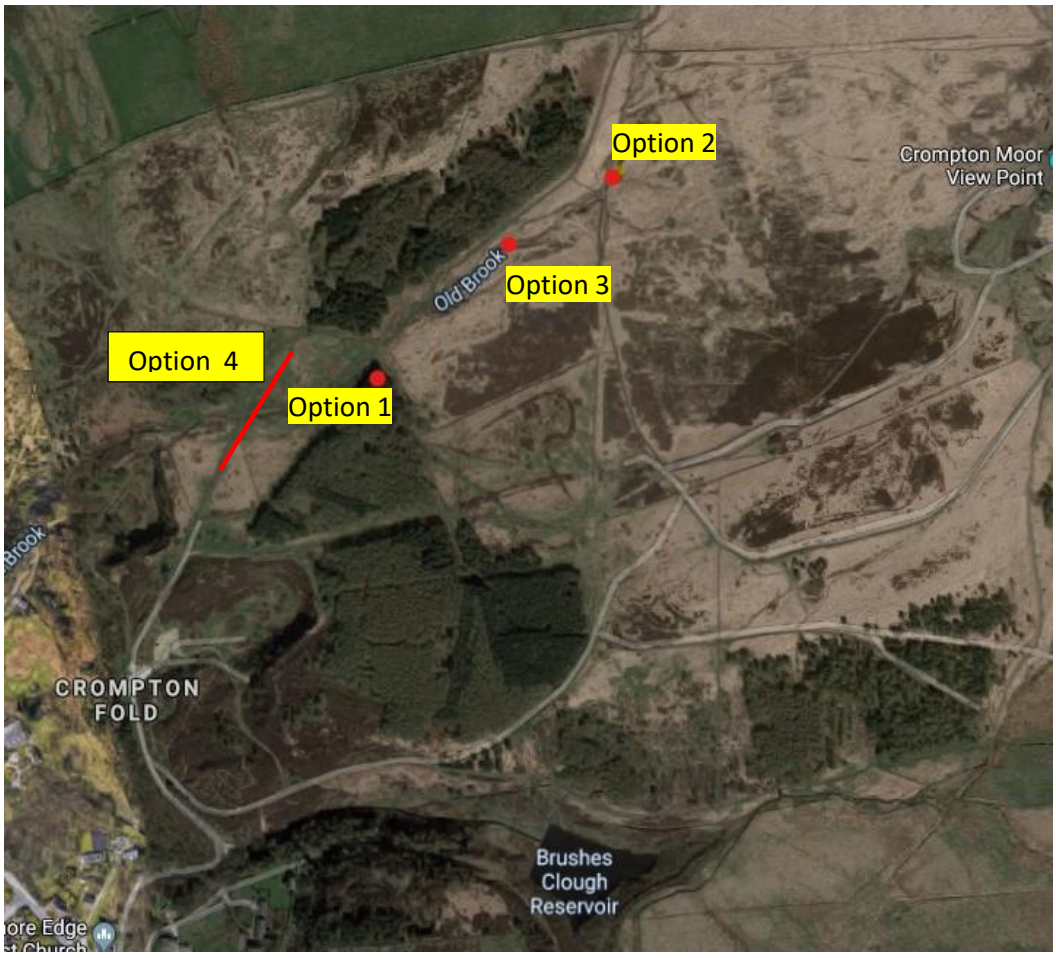
Natural Flood Management Proposals
Crompton Moor, Oldham

Background

A survey has been undertaken by the Natural Flood Management Advisor at the Mersey Forest who was able to identify a series of potential Natural Flood Management measures on the moor, see location plan below. The site assessment was also attended by City of Trees and members of the Friends of Crompton Moor. NFM measures are being considered to help slow down and reduce the amount of rainwater entering the Old Brook which flows into the River Beal, that latter being identified by the Environment Agency as source of flood risk to communities in Crompton and Shaw. The survey found 4 potential options for delivering NFM, see context map below.

Option Context Map



Option 1 – Plantation Woodland & Adjacent field boundary Drainage Ditch

Water drains into the woodland from an external adjacent drainage ditch at the bottom of the moor. After rainfall this forms a shallow stream that runs through the woodland and it drains into the Old Brook via a culvert. It is proposed that a log jam is constructed across the course of this stream to allow water to back up into a depression to create an area of 'wet

woodland' following rainfall events. The log jam would be constructed using felled timber from the immediate vicinity. This will also allow more light into the woodland and help to facilitate colonisation by wet loving understorey species.

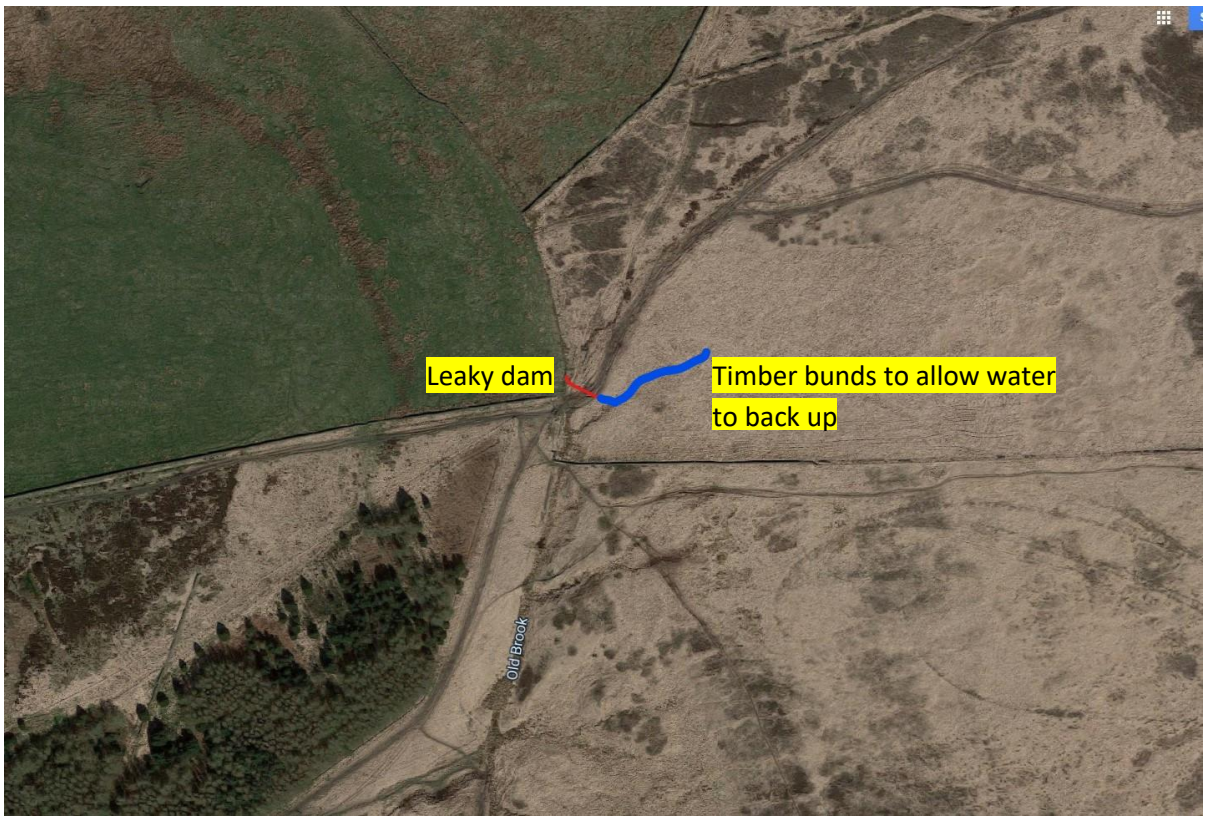
Example of log jam installed in a woodland

Culvert Discharging into the Plantation

Water Flowing Through the Plantation from the Culvert

Option 2 – Dam Old Brook to utilise storage space of abandoned reservoir

Inspection of the upper course of the Old Brook revealed a large adjacent depression which appeared to be the location of an abandoned reservoir, probably associated with historical mining activity. The proposal is to recreate this feature by installing a log jam across the brook and a series of timber bunds around the edges of the depression to hold back the water as it backs up.



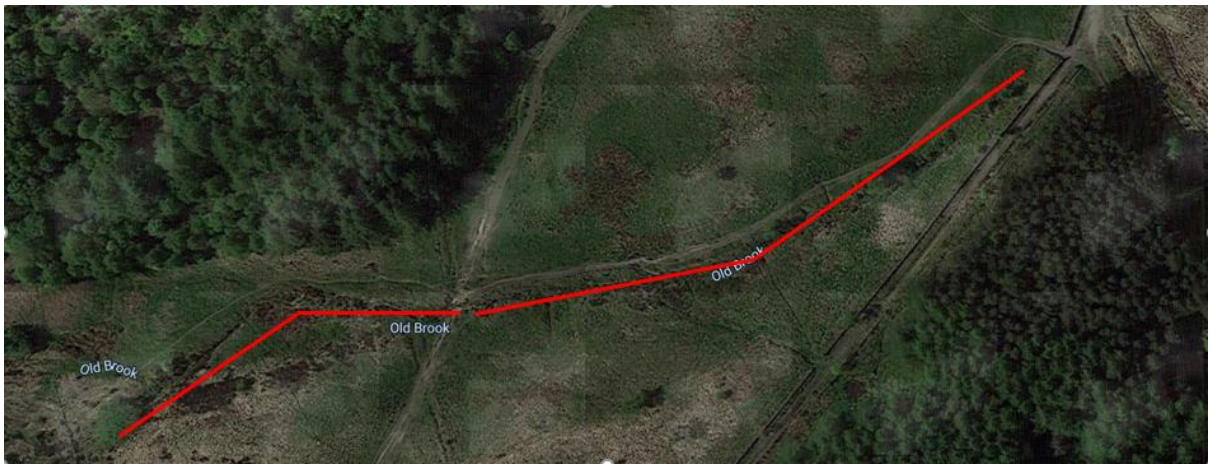
Location of Former Reservoir

Option 3 – Installing a sequence of 3 Log Jams

There are 3 pools along the course of the Old Brook with low level stone dams. It is proposed that log jams are installed a short distance upstream from the pools where the topography lends itself to hold back further significant volumes of water.

Photo of one of the existing pools showing area behind which attenuation can be achieved

Option 4 – Riparian Tree Planting on Lower Section of the Old Brook



On the lower section of the Old Brook there is the potential to create a clough woodland by planting trees in a narrow band either side of the watercourse. This will help to intercept rainfall to reduce the rate at which it enters the brook. Planting a clough woodland here with native species will also add biodiversity value by creating a new habitat space.

Materials

It is proposed that timber for the creation of the engineered log jams is sourced on site through selective thinning of plantation conifers. However, careful consideration needs to be given to the nesting locations of the resident Long Eared Owls.

Timescales

Undertaking these works is best done during the Autumn to hopefully avoid the worst of the weather which frequently occurs during the wintertime. Subject to approvals it is intended that contractors commence works in September / October time.

Funding

Funding has been secured for the Natural Flood Management measures by the Environment Agency through their Natural Flood Management (NFM) / Flood Defence Grant in Aid (FDGiA) programme and from the European Union's LIFE IP programme as part of the Natural Course project - https://naturalcourse.co.uk/region/greater-manchester/