

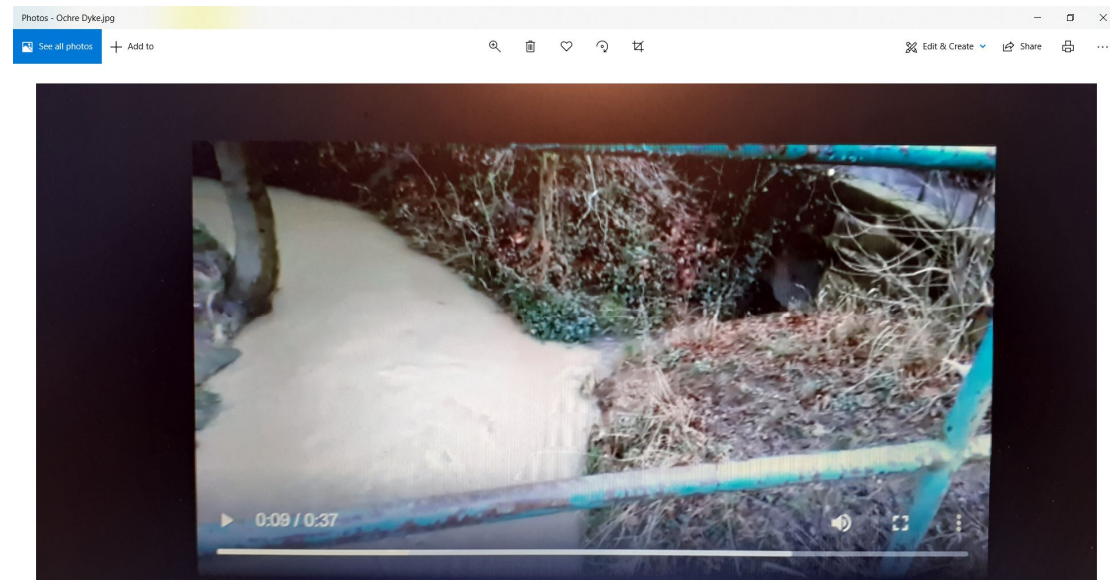
Flood risk assessment: Ecological Owlthorpe

General: It is always best practice to understand the layout of an area before undertaking a flood risk assessment. Best practice should always be to visit the area and obtain an overall understanding of previous and potential flood risks.

Local Knowledge and understanding of the area is essential.

The Ochre Dyke carries excess runoff water from the local fields, down stream from Ecological Owlthorpe starting from the highest points, one at Birley Moor Golf Course standing approximately 650ft above sea level and the other beginning at the 3 Way stile standing approximately 502ft above sea level. In winter the whole area becomes waterlogged, from the live stock grazing, through the woodlands around both spurs of the Ochre Dyke, Owlthorpe Fields and Owlthorpe Wetlands.

Both spurs of the Ochre Dyke then meet opposite the playground at Edenthorpe Grove at the bottom of Owlthorpe Forest Settings then through Westfield Plantation. The water is carried past Crystal Peaks Shopping Centre standing at approximately 183ft above sea level, then into the River Rother and on to the River Don.



The water table.

In winter the water table fills leaving standing water on Ecological Owlthorpe, just ask local residents who understand not to venture off the main trail in winter or you are liable to sink in the mud.

Old Mine Workings. (mining123.pdf)

The Ochre Dyke has a particular warning sign of pending floods. There are a number of disused mine workings beneath Ecological Owlthorpe. When the mine workings are full of excess water they release minerals that turn the Ochre Dyke into the Ochre colour it is famous for. When this happens Ecological Owlthorpe becomes completely waterlogged.

Because of Global warming flooding is more frequent, resulting in winter 2019/20 in the flooding in Beighton, Rotherham and Fishlake Doncaster .

“Coal is formed when dead plant matter decays into peat and is converted into coal by the heat and pressure of deep burial over millions of years.[2] Vast deposits of coal originate in former wetlands—called coal forests—that covered much of the Earth's tropical land areas during the late Carboniferous (Pennsylvanian) and Permian times.” The coal deposits in Owlthorpe indicate that trees and vegetation have been present in this area for millions of years. I have had a look upstream in the Ochre Dyke and found some trees that have lived and died and are in a state of decay and are in the long process of bio-degrading. It seems to me that the coal seam under Owlthorpe was originally trees and vegetation which has washed under ground by the Ochre Dyke. The flora page on the website indicates Ancient Woodland. Please also view the interpretation board (Moorhole Colliery) on Ecological Owlthorpe's website, this gives a better understanding of the mining history of Owlthorpe

Building over old Mine workings.

It is never advisable to build over old mine workings. The dangers are obvious, particularly when the old mine workings are known to flood. After being denied planning permission on a number of occasions by Sheffield City Council, to build over the old mine workings in Ecological Owlthorpe, Avant Homes have now applied to the Secretary of State for Housing. If permission is granted the dangers are obvious. The pressure of more building over the old mine workings may cause the old mines to collapse, causing not only subsidence to the new builds but also to existing properties in the area. The danger of more flooding will increase. My suggestion to Avant Homes is to look for a Brownfield Site such as the old aerodrome at Norton which is a brownfield site by definition and has many disused, derelict buildings in need of demolition and re-development.

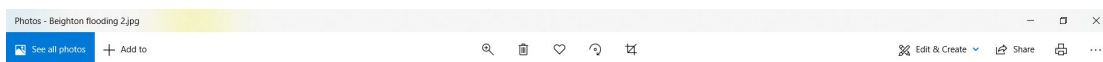
Owlthorpe Industrial Heritage

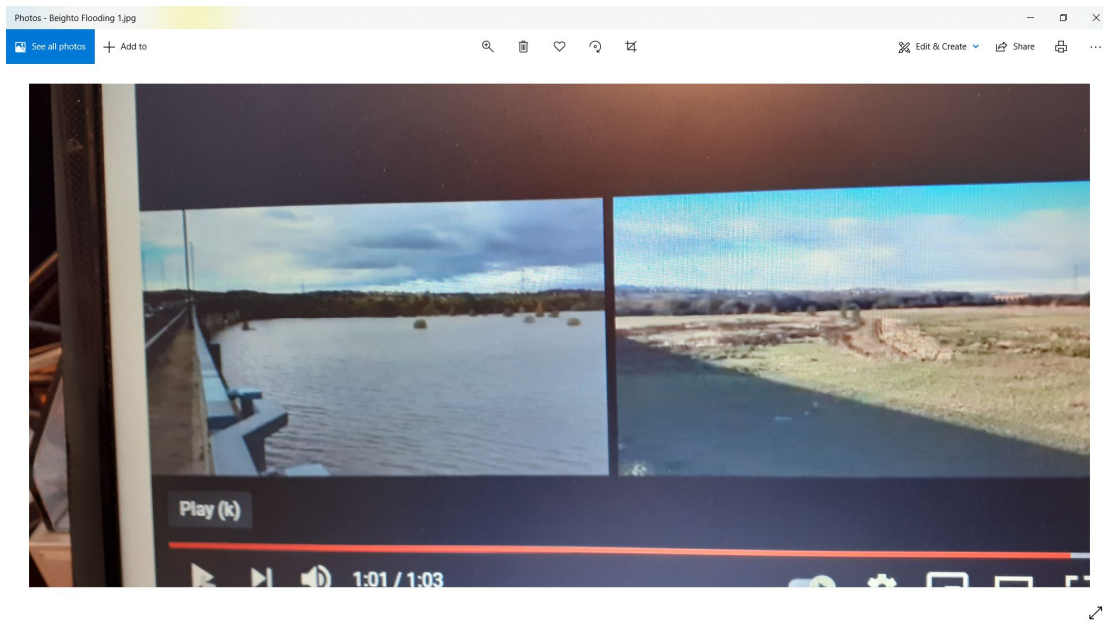
Mosborough,(of which Owlthorpe was historically a part), Hackenthorpe and Beighton are all mentioned in the Domesday Book. The area in those days was mostly agricultural, but uniquely cottage industries of sickle and scythe making flourished alongside. Locally charcoal was made for the smelting of the metal used in this manufacturing process using wood from the abundant coppiced woodlands. A recently erected monument to the industrial heritage of the area references the charcoal making process
GPS co-ordinates: 53.327749,-1.373611

We all complain about the deforestation of the Rain Forest to make way for farm land etc. It seems to me that Owlthorpe woodlands has also been a victim historic deforestation, first to make way for farming then using trees to make charcoal to make farm implements, deforestation to make way for Birley Wood Golf Club, then the building of the Owlthorpe housing estates. More deforestation took place to make way for the erection of Electric Pylons. This needs to stop. It seems to me that local politicians just do not understand what they are doing to the environment. I say **“NO MORE BUILDING IN ECOLOGICAL OWLTHORPE”**

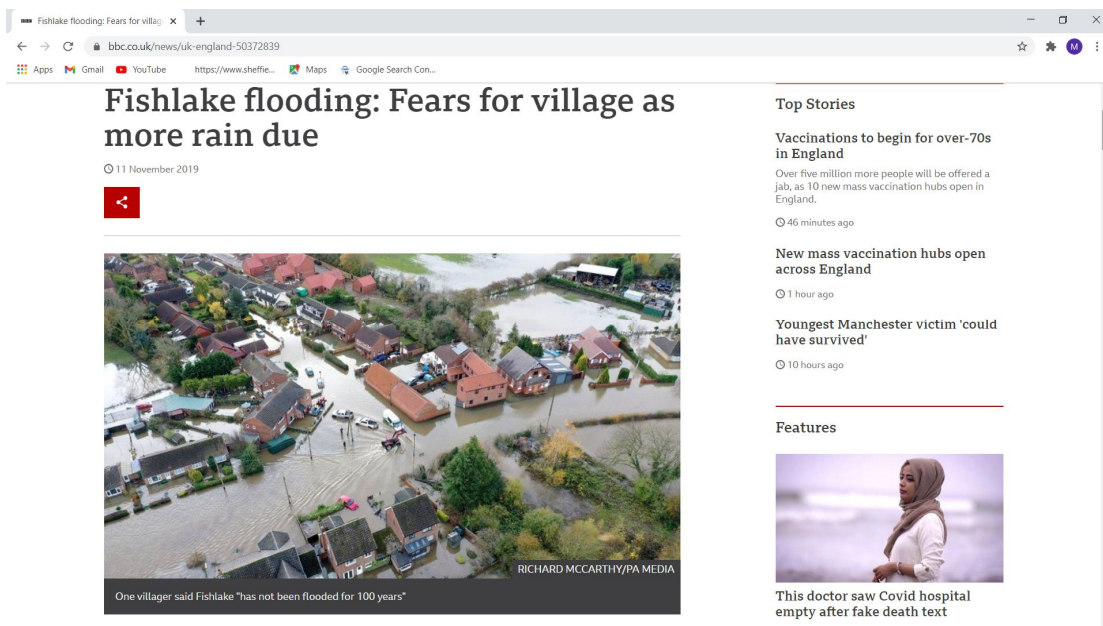
Downstream flooding.

When the water table is full the disused mine workings flood and the Ochre Dyke turns the Ochre colour it is famous for, this is a telltale sign that flooding will occur downstream.





The next in line to flood when water from Ochre Dyke accumulates on Beighton flood plains which hold millions of gallons of water but when full the water then flows into the River Rother. More Flooding occurs down stream with the confluence of the rivers Rother and Don in Rotherham. My wife's cousin was flooded out at this point and has had to find new accommodation. It is not nice to lose all your possessions believe me. The flood waters then carry on downstream through Doncaster and on to Fishlake.



We all remember the flooding in Fishlake and the devastation caused to many families. Some of the water that ended up in Fishlake came from

the Ochre Dyke, its head waters standing 650ft above sea level. Fishlake stand only 23ft above sea level, a difference of 627ft. Fishlake is some 37miles down stream from Owlthorpe make no wonder it flooded.

Government Legislation and Directive.

In this Sophie Ridge interview, George Eustace explains the government's response to UK floods: An extra £4 Billion to be spent on flood defences. In Yorkshire up stream nature-based solutions are to be supported. The video is available on you tube.

Government Press Release:

"Environment Bodies set joint vision to tackle climate change. Environment Agency, Forestry Commission, and Natural England outline a shared vision to use up-stream nature-based solutions to tackle the climate emergency."

Published 6 August 2020 : Announced by Robert Jenrick MP the Secretary of State for Housing:

“Government sets out plans to overhaul outdated planning system and reform the way the country builds. Plans to streamline process cut red tape and harness technology to deliver homes faster . **Valued green spaces protected for future generations, with more building on brownfield land.** Building beautiful homes, with communities at heart of new planning system. 30% discount through First Homes, with an emphasis on key workers.”

Litigation

The cost of the floods in South Yorkshire ran into the £millions with many residents and loss adjusters still assessing insurance claims. If Sheffield City Council (LPA) and Avant Homes build in Ecological Owlthorpe and flooding occurs down stream again, Insurance companies and loss adjusters may take the view that Sheffield City Council (LPA) and Avant Homes have ignored government legislation and not taken flood risk assessments seriously, therefore, they may prosecute to recover losses.

Conclusion

In making this flood risk assessment in line with government legislation and directive I suggest that Ecological Owlthorpe be granted a preservation order as an upstream nature based solution to protect the environment.

In order to combat Climate Change caused by deforestation we need to help the Ochre Dyke by planting more trees up stream. Starting near the Birley Moor Golf Course, more trees could be planted in the farmland and grazing area. There is a strip of grassland at the North side of Ochre Dyke leading down from Birley Moor Garden Centre which could also be used to plant trees. Owlthorpe Fields has many maturing trees establishing, however, there is room for more planting which will enhance the woodland setting thus contributing to the solution. The roots of trees absorb the water; supply the oxygen we need and store carbons all which counteracts the pollution from nearby traffic.
