

# Toddbrook Reservoir Flood, Whaley Bridge

If you have followed much of the UK national news this summer, you'll have no doubt heard about the perilous position the town of Whaley Bridge was in, thanks to the unprecedented rainfall causing the Toddbrook Reservoir that sits above the town to overflow.

The overflowing water caused potentially catastrophic damage to the retaining wall of the dam, triggering a multi-service operation and an evacuation of Whaley Bridge.

It's a serious event close to us at Rotaflow, because we are based in Whaley Bridge and the community means a lot to us. We all live in and around the town and have been located here for over three decades.



*It's important to point out that at no point were we in danger, but feel the emergency services and all other people involved in the operation deserve our thanks and praise for their work in preventing a massive catastrophe for thousands of people.*

## **The Toodbrook Reservoir Damage**

The concern for the wall came from the fact that the water levels were so high that they breached the dam – the resulting huge volume of water that cascaded down caused significant damage to the concrete façade and underlying clay mound that surrounds the concrete core wall.



There was a very real concern that the dam wall would give way, so on the advice of structural engineers the town was evacuated as a precaution. It also meant a multi-service team could work unencumbered on reducing the water levels in the dam and repair the dam wall.

### **What Exactly Happened**

In the days before the wall breach, there had been persistent rain in the Peak District and East Cheshire, with some parts of the area being heavily rained on without pause for five whole days. The volume of water in the surrounding hills caused natural water courses to overflow, meaning rivers and streams burst their banks and the drains couldn't cope.

Whaley Bridge is surrounded by hills, making it somewhat of a basin. Normally this isn't an issue as there are a number of natural outlets for rainwater in the town the drainage works perfectly well, but this level of rain was beyond anything we'd known. It was monsoon season!

The nearby town of Poynton flooded, as did parts of Stockport. The whole region made the national news.

Gradually the reservoir filled to a point where it began to overflow. Although this isn't an entirely new phenomenon (water has lapped over the wall before), the extent to which the water flooded over was – locals filmed videos showing white water rapids tumbling over the wall. It was unlike anything anyone had ever seen in the town before.

As the rain slowed and the water overspill slowed, the sheer extent of the damage was exposed...



Having assessed the damage, structural engineers took the view that unless drastic action was taken, the wall would break and the 300-million-gallon reservoir would flood the town below, home to 6,500 people and scores of businesses.

## Repairing the Damage to Toddbrook Reservoir

The emergency repairs were primarily undertaken by the RAF – a Chinook helicopter dropped over 500 one tonne bags of aggregate into the hole in the dam wall, acting as a short-term repair. These repairs will buy the authorities enough time to decide what to do as a longer-term solution to the problem.



The repairs ran alongside a multi-service operation to reduce the water levels in the dam by 8 metres. Teams of specialists worked around the clock for a number of days to complete the task, which was further complicated by additional rainfall and the fact that the alternative watercourses were themselves already either almost full, completely full or had burst their banks.

Initially the authorities used a large number of pumps to drain water from the reservoir, lowering the water level as much as they could. Thankfully, the incessant rain stopped, allowing nature to take care of some of the rest as water evaporated and the diversionary water courses also returned to more sustainable levels, allowing excess water to be pumped into them.

The pumps were taken from every local fire service, even as far away as Stoke and North Manchester. Pumps already in use in lower priority flooding areas around Stockport and Cheshire, including the A555, which was closed for over a week because of the rain were also recruited to help drain the dam.



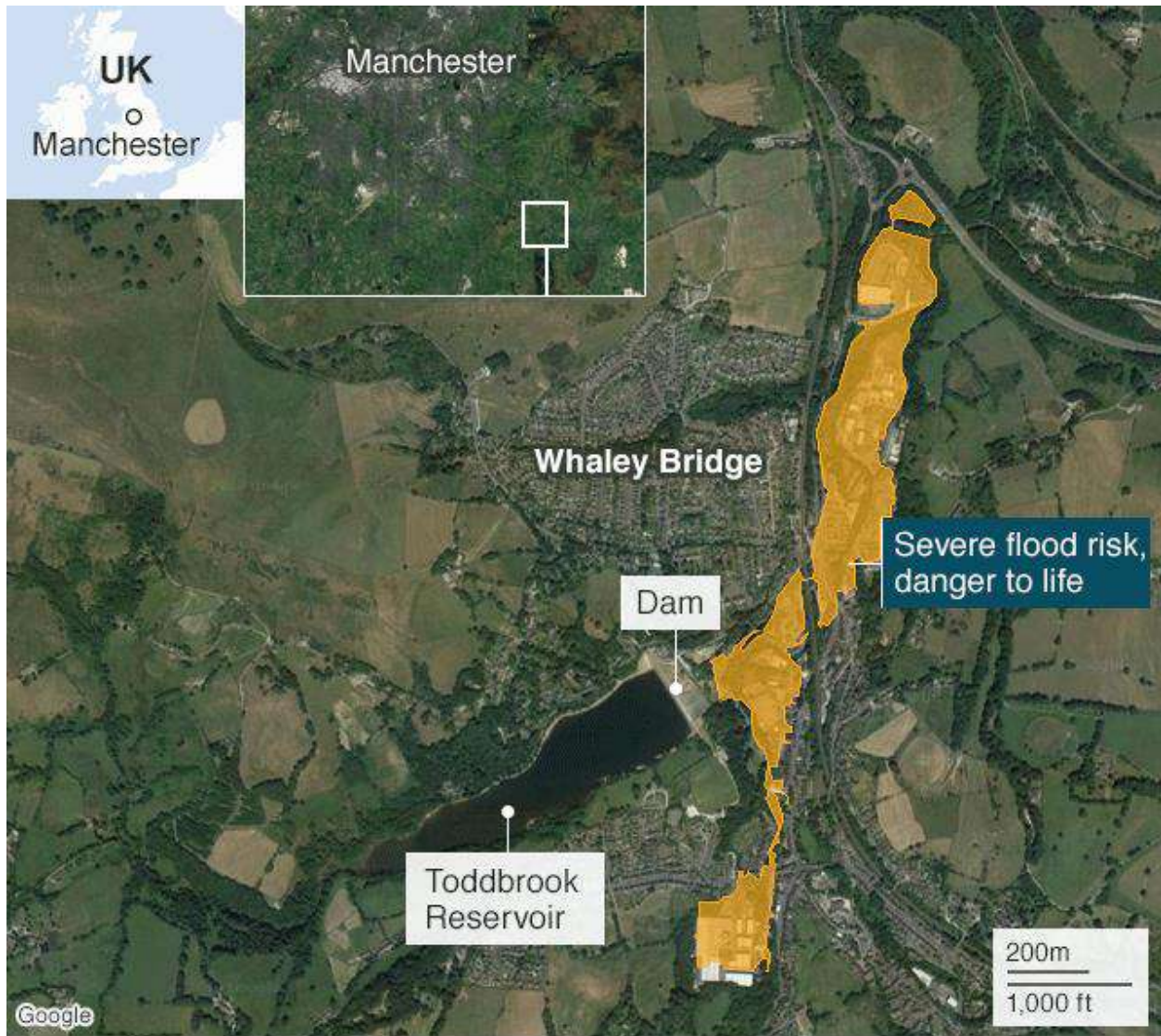
To assist in the operation running smoothly, local businesses helped to build makeshift roads to allow emergency services access to the Toddbrook reservoir site.

### **The Whaley Bridge Evacuation**

A combined effort between the Police, Fire crews, Mountain Rescue, Canal & Rivers Trust, the Environment Agency, the Army and the RAF ensured the town was safely evacuated and the public were well-informed.

Residents filled sandbags and the community pulled together and really highlighted the best in human endeavour. Local groups provided survival equipment and cooking facilities. Schools and the council made sure all were catered for.

It was a massive upheaval for locals – being removed from house and home, without many belongings, sleeping on a school hall floor and being fed from a school canteen for nearly a week is an obvious stress. The inability to go anywhere and make much contact with the outside didn't help either.



Source: Environment Agency

BBC

It was a full six days before the water level had reached a safe point, the emergency repairs were deemed effective and everyone was allowed back home. There was a genuine sense of relief when everyone was given access to home and work again.

Even now, weeks after the event the area is still closed to the public.

### **What Now for Toddbrook Reservoir and Whaley Bridge?**

There is going to be a full enquiry into the whole event – we're sure fingers will be pointed.

As it stands, people have their own ideas as to who or what was responsible, with various government departments being blamed, a general lack of investment being blamed, the freak weather conditions being blamed and I even heard industrial

revolution pollution being blamed for a lack of moss on the peaks, which acts as a 'sponge' for rain water and prevents flooding.

The reality is that this is a freak event – it hasn't happened before and thanks to the warnings heeded from this time, it won't be happening again.

**Everyone at Rotaflow would like to thank all of the people involved in the saving of Toddbrook Reservoir and preventing an event that could have potentially costs the lives and livelihoods of many, many people.**