

SILSDEN FLOODS

26 December 2015



A report on where the water came from, where it went and the damage caused.

Rev 1.0

Author: Peter Ford

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Introduction

The Silsden Beck flood on 26 December 2015 was the most recent of many floods over the years, but this flood has caused more damage than past floods. There was a reasonable amount of warning of a “high Beck” and this time it was possible to document the event.

The walk on 26 December 2015 started at 8.30am and finished at 11.45am. The route taken was as follows – across the park (it was very wet underfoot) to the top of Mitchell Lane – down Mitchell Lane – down St Johns Street – under the canal culvert – to Belton Road – Keighley Road to the Aire Bridge – return to Kirkgate via Keighley Road – to Bridge Street / Chapel Street / Pickard Lane – up North Street to the dip in the road just down from Tannery corner – (the road was impassable without wellies so) back to the cut through to Bolton Road – up Bolton Road to Tannery corner and on up Bolton Road to the end of the site for the new houses – home.

The flooding in St Johns Street

This time because of previous floods the residents were more organised and flooding was mitigated.

Most of the water in St Johns Street was runoff from the park. The water was pouring through the gap in the park wall at the top of Mitchell Lane, and only because of the strategically placed sandbags did it go into the two adjacent drains – this stopped a lot of water from going down Mitchell Lane. However, water also escaped from the park through the fence and this water ended up in St Johns Street.

The large storm drain (at the bottom of Mitchell Lane) is completely blocked, the water could be seen bubbling out of it. The question should be asked as to where the water going to from the drains further up Mitchell Lane?

Not being able to get to the beck via the storm drain, the water went down St Johns Street. However, this time it was diverted with sandbags through a hole in the beck wall. This was quite a lot of water, please see the pictures.

The floodgate

Had this been finished it would have been used. The water was effectively kept in the beck by boards and sandbags. At the time I photographed the floodgate the water level was about 8cm above the sill of the ford and I think the water level at the time was going down. Whether such a large barrier is needed for this job is debatable, but a barrier is required so that local residents can close this source of flooding easily. **The wall between the top of the weir and the ford is porous**

Short Term Solutions

- Build a small wall around the two drains (by the gap in the park wall) to direct runoff water into the drains.
- Make the sandbag water diversion across St Johns St more permanent until....
- The large storm-drain at the end of Mitchell Lane / St John Street is cleared.

Long Term Solution

The runoff water from the park should not escape from the park. A large holding tank should be built in the corner of the park to prevent this run off.

Note: floods in Silsden Beck are caused by runoff, they are not restricted to the winter months when the surrounding land is waterlogged, but can also occur (and have done) in the summer months when the ground is dry and flash flooding cannot be absorbed by the hard ground.

The Parking Area next to the beck in St Johns Street - A large crack has appeared possibly caused by surface flooding undermining the area.

The flooding in Pickard Lane

This occurred because of surface water which originated above Bolton Road. Please see the pictures.

The Solution

Improve the drainage ?????

Keighley Road

The wall by the entrance to Aldi has collapsed with part of the pavement – This collapse could have been exacerbated by the excavation to lay pipes along by the wall. The pipes can be seen exposed on the beck side and I can only assume they are still intact or we would be complaining about the lack of services by now!

The Bridge to the north of Marsel House – this has partially collapsed and will restrict the flow of water in the event of another flood. It has also made the pavement very uneven.

Belton Road Culvert – this is still causing Belton Road to flood. Although a lot of work has been carried out just before the culvert the fact remains the culvert is not of large enough capacity to take the beck in flood. The water from the beck overtops and creates a large lake on Belton Road, there is evidence of this happening from the large pieces of wood above the entrance to the culvert. (If the lake on Belton Road gets large enough the water drains through the gate into the field).

Large Puddles on Keighley Road – there were two very large puddles on the west side Keighley Road (down from the golf driving range). They could have been caused by a blocked drain but I know one always occurs every time there is heavy rain. The cause of these puddles should be investigated.

Contingency Planning

It was obvious from these floods we got very little assistance from Bradford Council in the form of emergency supplies of sandbags and the means to keep houses safe from flooding. To be fair the floods were far worse in other areas and it isn't surprising if it took 35 minutes to get through to the emergency number only to be told the sandbags had run out. Even if they had sandbags it would have taken time to get them delivered to Silsden.

Recommendation

We should not be relying on the good nature of a local builder to supply wood and sandbags. We should have sandbags already stored in a local location where we can look after ourselves. There should also be a plan in place for emergencies.

Beck Maintenance

For several years there has been little or no maintenance carried out on the beck watercourse. In the summer months it was easy to see large trees and rubble from previous floods in the watercourse. The overall responsibility of Silsden Beck lies with the Environmental Agency, but it's up to owners of the land bordering the beck to clear it out and to keep the watercourse clear. It is not good enough for those people to have the opinion that the rubbish in the beck will be cleared away when the beck floods again.

Keeping the beck clear is a large burden on the adjacent landowner and some of the debris which should be cleared is not easy to be handled or remove, perhaps some sort of Silsden Town Council assistance scheme should be setup?

Environmental Agency

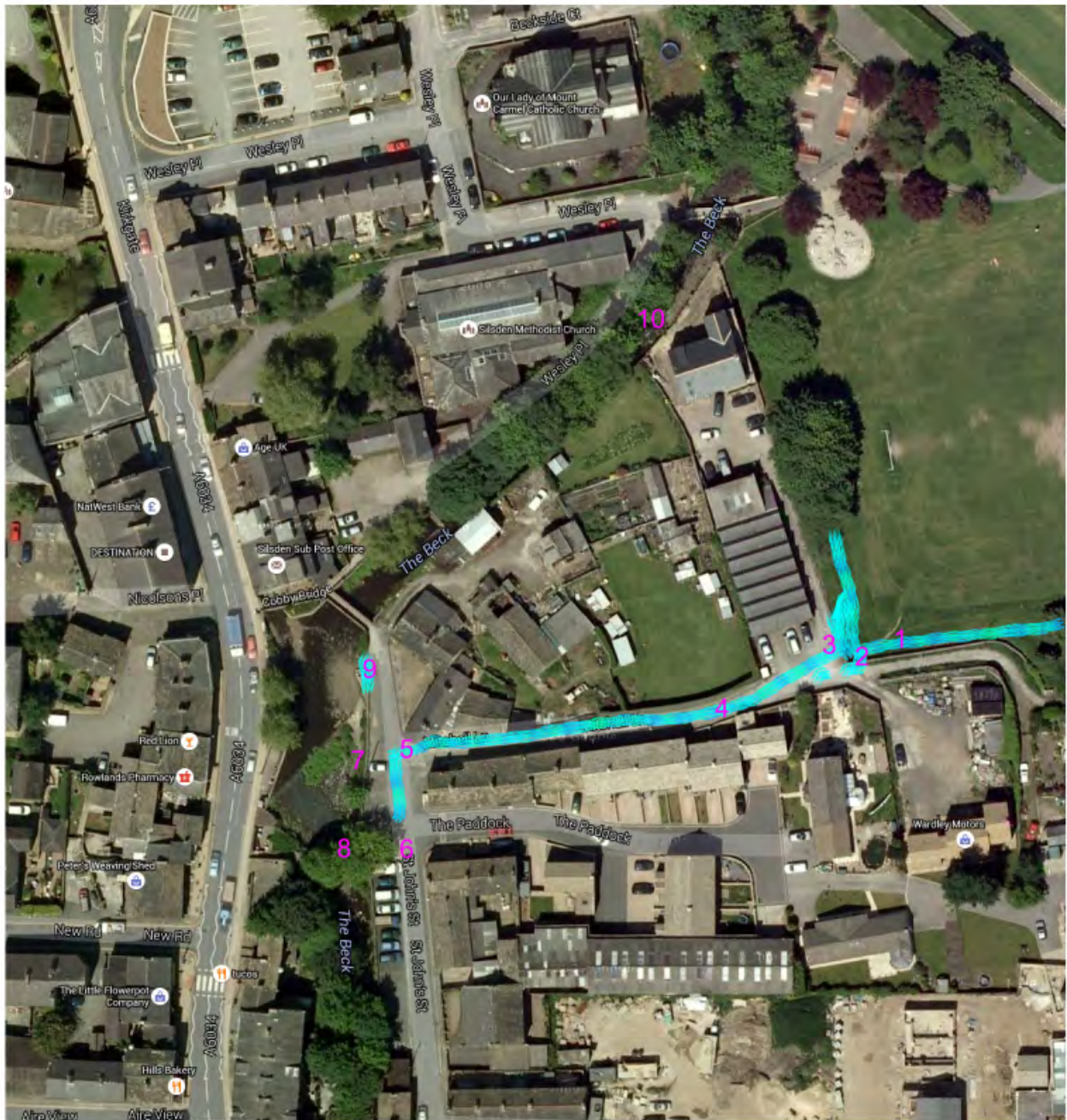
It should be the responsibility of the agency to police the beck and advise adjacent landowners to carry out required preventative maintenance

This flood caused damage to the walls and banks of the beck. There isn't usually damage to the beck bounds, however the flood was high and the ground was saturated. There were a few very large logs washed down, these were not freshly cut and the branches had been removed i.e. they were logged.

The log removed from the beck, just above the Post Office Bridge, by local residents just before the 26 Dec flood, was over 6m in length. Had this log hit the central pier of the bridge it would have probably demolished it!

The fields of the lower beck area along Keighley Road are littered with large logs – all of these logs must have travelled through Silsden carried by the beck in flood from the upper water course.

St John Street - Mitchell Lane, Floods 26 December 2015





Pickard Lane Floods
Boxing Day 2015





Floods along Keighley Road - Silsden Beck, Boxing Day 2016



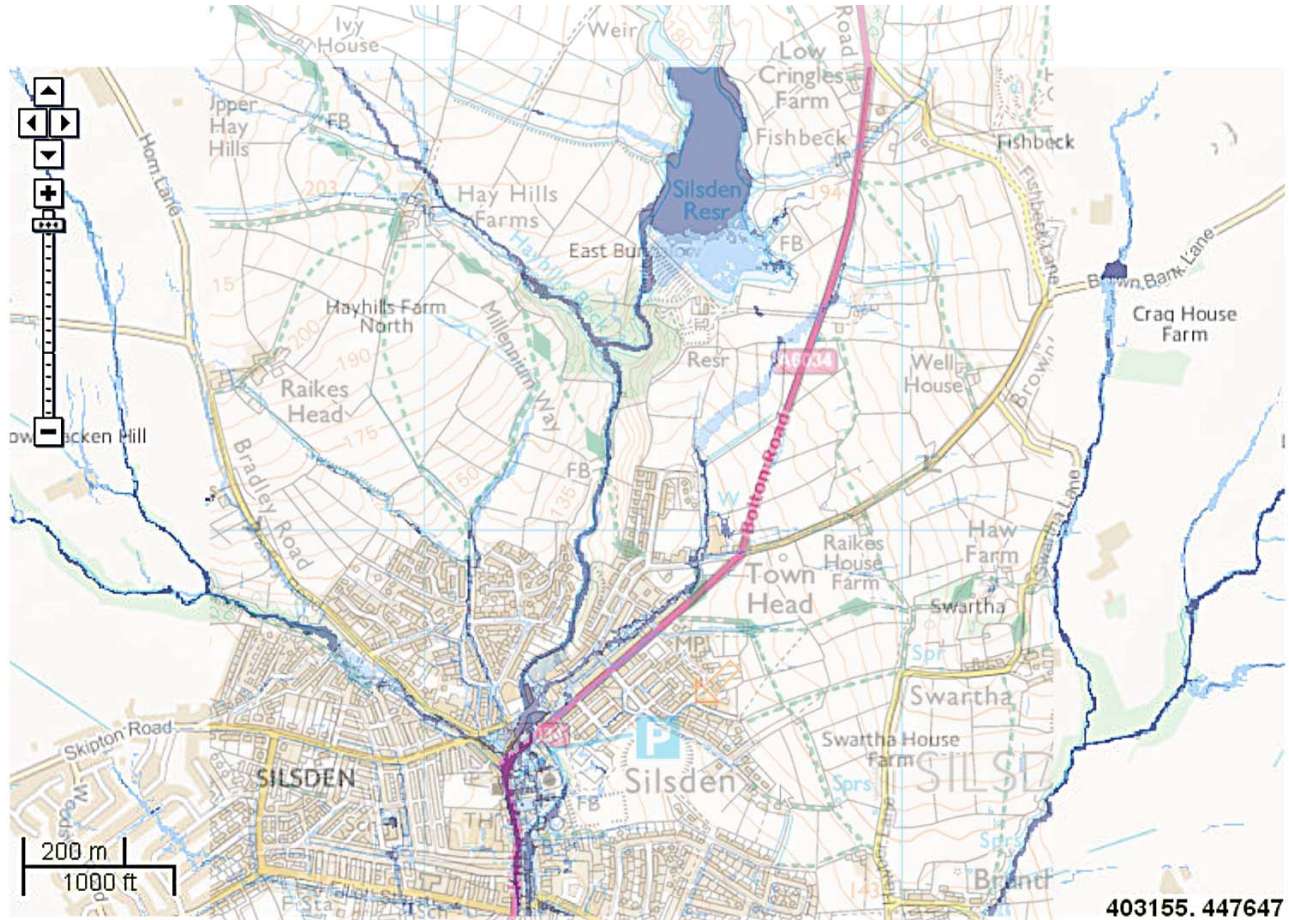


The Damage





Surface Water Flooding Map (with an overlay to show the field boundaries)



Key

The location you have selected is in an area that has a very low chance of flooding from surface water.

Very Low
↑

Low

Medium

High

What does 'very low' mean?

Very low means that each year, this area has a chance of flooding of less than 1 in 1000 (0.1%).

This type of flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm.

This is based on the best information we have available, such as ground levels and drainage.

Floods Destroy. Be prepared

Don't wait until it's too late. Prepare for flooding by taking some simple steps to reduce the impact on your home or business.

- Complete a flood plan
- Find out how to prepare your property for flooding
- Check the three-day flood risk forecast

A little preventative maintenance perhaps?

18 Sept 2015

Reported at STC meeting 8 Oct 2015 (item 11)



12 Dec 2015



15 Dec 2015



Log from Upstream

Removed by local residents 16 Dec 2015



26 Dec 2015



27 Dec 2015

