Storms in Cumbria December 2015
The waterfall in our grounds was spectacular and very noisy!
Key dates in December 2015

Fri 4\(^{th}\) The heavy rain started on Friday evening, after a month of high rainfall. The incoming storm was named Storm Desmond.

Sat 5\(^{th}\) This was the day of heaviest rain. In Keswick 144.8 mm of rain fell in 24 hours. The highest hourly rainfall was 13.2 mm between 3 and 4 pm. Greta Bridge in Keswick was closed to traffic.

Sun 6\(^{th}\) The Borrowdale Road was closed to traffic. People evacuated their homes as water levels rose.

Mon 7\(^{th}\) There was not actually much rain on Monday!

Many areas experienced repeated flooding in December during Storm Eva, Storm Frank, and Storm Gertrude.
A graph showing daily precipitation (mm) totals for the period 3rd – 31st December 2015
How was the hostel affected?

• On Saturday morning we cancelled our guests for the weekend, due to road and bridge closures and other hazards.
• The banks of the beck started to collapse, and our mains water supply was cut off.
• United Utilities delivered bottled water to the hostel, and to all other affected properties in the area.
• Two guests, who had not received our warning, made it to the hostel and so they were our only guests on the Saturday night.
• On Sunday the Borrowdale Road was closed. Nicola, who usually cycles to the hostel from her flat in Keswick, stayed in Keswick and helped Keswick YHA instead (they were badly flooded by the River Greta).
• The banks of the beck were eroded to within a metre of the hostel, and our water and waste pipes were damaged. However, our plumbers and builder (Keswick Plumbing and Billy Edmondson) rapidly restored our water supply.
• On Monday there was a pause in the rain and Nicola made it to the hostel. Kathy and Dave, the managers, assessed the damage and contacted the insurance company, who swiftly appointed a structural engineer and local contractors.
• With concern about our foundations, and our main waste pipe out of action, we had to close to guests.
• 3 diggers moved tonnes of boulders into the beck, to shore up the banks. Our waste pipe was mended in January, and we re-opened on the last weekend of January 2016. We lost approximately £20 000 of business.
• We successfully applied for a £7000 grant from the Cumbria County Council Flood Recovery Scheme. This was intended for marketing and special offers, to help bring in more business.
The view from the bottom of the driveway, looking towards the hostel. Sun 6th Dec.
The beck came very close to the hostel as parts of the banks collapsed. Sun 6\textsuperscript{th} Dec.
The beck came very close to the hostel as parts of the banks collapsed. Left: looking upstream. Right: looking downstream. Sun 6\textsuperscript{th} Dec.
At the dam on Barrow Beck, parts of our hydro-electric plant were damaged. Here you can see the Forebay tank and the connecting pipe, which were wrenched away from the dam. The pipe usually delivers water to the turbine. So unfortunately we couldn’t take advantage of the high volumes of water for electricity generation. Sun 6\textsuperscript{th} Dec.
Upstream of our waterfall, Barrow Beck was above the normal capacity of the channel. Sun 6\textsuperscript{th} Dec.
A little further upstream, here is the beck at Ashness Bridge. Luckily the bridge was not damaged, perhaps thanks to some recent strengthening work. Sun 6th Dec.
Looking at the rear of the hostel, where the footpath collapsed, damaging mains and waste pipes in the process. Luckily the foundations of the house were not damaged. Mon 7th Dec.
A view from the beck channel, where the mains water and waste pipes run through the banks. Mon 7th Dec.
The collapse of the banks was considered an emergency, and so our insurers swiftly appointed firms to inspect the house foundations, shore up the banks, and re-connect the mains water. The insurers and loss adjuster appointed a structural engineer from a Kendal company R G Parkins, who then appointed Maryport contractors Thomas Armstrong to undertake the repair job. The contractors worked really hard, all the way into the afternoon of Christmas Eve, to shore up the banks of the beck, moving £40 000 worth of rock armour into the channel by the hostel. Hostel staff watched in amazement at the skill of the digger drivers as they manoeuvred the giant boulders into place.
The diggers moved £40 000 worth of boulders into the channel of Barrow Beck, to re-inforce the banks.
Here are some of the boulders that the diggers moved into the beck.
The diggers at work!
Scenes of flooding in our local area. Left: Ashness Jetty. Right: Alex Scott, our Australian volunteer, cycling along the Borrowdale Road. The lake is flowing over the road.
Scenes of flooding in our local area. Left: the River Greta overflowed into Fitz Park and river-side homes. ‘Fitz’ actually means water meadow, so this area is expected to flood. Right: looking downstream from Silver Bridge, over the River Greta. On the left you can see Keswick Youth Hostel (the white building with the balcony), with their walkway under water. Water flowed into the youth hostel, through the front door. It had to close to guests for several months.
Accounts of Storm Desmond from staff members Pez Bullen and Nicola Leah

Response to Storm Desmond, by Nicola Leah, December 2015.

It seems that you’re only a true Cumbrian local resident when you’ve got at least one story about living through an extreme weather episode. Well, I’ve been here for two floods now, along with a few of the harshest winters for many years. Hopefully that makes me accepted in the community!

I’m not sure I had anticipated how extreme the weather on Saturday 5th December 2015 was going to be. I think that I had heard there were flood warnings, but living in the wettest county in England, you tend to get a bit blasé about them. Anyway, I had worked the ‘late’ shift at the hostel on the Friday evening, so I had slept over. In the morning I woke up to torrential rain. As usual (almost), any time anything goes wrong, Dave and Kathy (our managers) were away, visiting their daughter in Durham. We get a lot of rain here, so I didn’t pay much attention until the other staff pointed out how much water there was around. The road at the bottom of the drive was starting to flood from the lake and new rivers were coming down from the fells. I decided to ring around the (luckily) few guests and visitors we had coming that weekend to tell them not to come.

I was just about to ring Alex, our current volunteer from Australia, when he appeared in the hostel. He had cycled through large ‘puddles’ on the Borrowdale Road to get to the hostel for work. He was definitely in a cheerful state of mind, which was amazing. I think it takes a lot to get an Aussie down.
I had pretty much decided at that point that I was going to stay at the hostel for the weekend. I had cycled through the flood water on the Borrowdale Road in 2009, and although it was ok, I didn’t really want to do it a second time. Until, that is, Alex decided that he was going to cycle home that afternoon, so I thought I had best keep him company. To be honest, cycling through that amount of water seems a lot more acceptable than driving or walking. As long as you approach each puddle in a low gear and keep pedalling, you are above the water at a reasonable height, and there is no engine to get flooded and stop working.

We were pretty gung-ho about the ride, approaching each flood zone with screaming and laughter, and with the water up to our knees, but we got through it and got back to Keswick. As we got towards the town centre, we realised that the road had been closed by the authorities. Cars were still driving past the barrier, but I have no idea how far down the road they thought they were going to get. I did at least manage to stop one non-local driver and his partner from following his sat-nav over Honister mountain pass to get to Cockermouth, because the main A66 road was closed.

After going home and changing out of one set of waterproofs into another, I set off to have a look around town to check out the flood levels, and it was becoming more apparent that this was at least as bad as 2009. The water wasn’t quite over the flood defences at High Hill yet, but it was getting there. A family I know were evacuating their property opposite Booths, and fire engines were pumping water from Penrith Road back into the River Greta. Mountain Rescue and Police Community Support Officers were everywhere.
I needed something to do, so I set off to Keswick YHA, which is directly next to the River Greta. I know some of the staff there, so I wanted to check they were all right, and if they needed any help. The walkway at the front of the building was closed, as the river was already over it and running directly alongside the building so I wandered around the back, as this became the hostel’s main entrance over the weekend. The water was starting to seep through the front door of the hostel at this point, although the doors were doing a good job of keeping it out. I helped to move stuff upstairs in the staff house next door, and then left them to it.

Next day, after a long night with the wind whistling and the rain hammering, I went to check that Alex was ok, and then we both went back to Keswick Hostel to check on them. The water had come in the building about a foot high in the night, but it was starting to recede as the rain had stopped. They had their front door open and were sweeping mud and water out into the river, which was still running over the walkway and right past the hostel entrance. Even at this point, it was obvious that the walkway would need to be rebuilt. We stayed for a couple of hours helping with the clean-up.

Alex and I finally made it back to the hostel on the Monday morning to see the damage to the building. It was actually quite a bright, dry day. The hostel itself seemed fine, but then we went to inspect the stream at the side of the path, and it was actually quite shocking to see the gap where our footpath used to be, and how deep and wide the river bed had become.

Kathy and Dave were still in Durham, but managed to get back home later that day, with a bit of jiggery pokery on the train lines, as Carlisle Station was still under water.

Things will get better though. Cumbrians are a tough breed, and used to just getting on with it. They’ll sort everything out, and make everything shiny and new and hopefully flood resistant for next time...
Looking out of the self-catering kitchen window at ‘daybreak’, I saw that the lake had already risen well into the field across the road. Lake in the field is a good indicator that we’ve had some particularly heavy rain. In this case, the forecast was for torrential rain all day and half the night: lake in the field was just the starting point...

The rain was indeed heavy and no doubt it was torrential up on the fells. The waterfall was looking impressive. The more water tumbling over a waterfall, the better – it can only get more spectacular.

The morning passed by. A gale flung the rain at the hostel and the driveway had turned into a stream. Internet updates told of roads becoming impassable. The evening’s guests were beaten back by an impassable A66. We few staff went on with our humdrum work but it was difficult to concentrate.

Around lunchtime I togged up for a quick taste of the weather. The gale blew, the rain lashed down and the light was gloomy. It was an all-day twilight. The driveway stream was in good flow. Not only was water pouring down, it was taking an abundance of debris with it. Very impressive. And not normal.

As for the impressive waterfall, it had gone beyond spectacular. The beautiful white cascading waters were now a seething, roaring torrent of rage. The ferocity of the waterfall and the headlong rush down the beck of an enormous body of foaming brown water was simply not natural. It truly felt as if I were watching a disaster movie. Impressive and spectacular had become a little frightening.
The dismal mid-afternoon light was fading fast when I was called to the dining room. The footpath down from the waterfall was itself a fast-flowing stream but the ‘sight’ was of the ground beyond the path slipping away before our eyes into the gorge below. The beck was eroding its flank...and coming our way! Personally, I couldn’t sit there and watch the horror unfold but reports came through periodically: such as “that tree’s gone now” and “there goes the fence”. Where would it all end? One outcome was perfectly clear: the end of the building collapsing into the beck below. And ruin for all!

Darkness spared us further visual horror. We huddled together in front of the fire and turned in with the rain and wind unabating, wondering what we would wake up to. Not that getting to sleep was easily achieved – the imagination further stimulated by the thundering, tremoring waterfall.

A new daybreak. Storm had checked out early. The rain had stopped, the torrent had eased considerably – and the building was still standing.

However, the path round the corner from the front door leading up to the waterfall was now a cliff edge: at its narrowest point the distance separating hostel from abyss being one metre.

But one metre was enough. Read elsewhere how a thousand tonnes of boulders saved Pocklington’s Folly!