

Community Resilience Case Study: Braunton, Devon

"The most effective response to flooding can often be taken by local communities, if they are aware, prepared, trained and can respond." (Dorothee Fitzsimmons, Pathfinder Project Manager, Devon County Council).

Background

Braunton is a large village in North Devon, with a population of 8,128 people. It's a very popular holiday destination. About 500 properties are at risk of flooding, from the River Caen and small tributaries such as the Chapel Stream, as well as surface water flooding.

The River Caen poses a risk of flash flooding. Flash flooding is caused by intense rainfall and can happen suddenly, often before emergency services can arrive at the scene. It can be very destructive: flooding homes, moving rocks, tearing out trees, sweeping away vehicles and damaging buildings, walls and bridges.

Many homes are at risk of flooding. The most vulnerable properties, which suffered recent flooding, are the commercial properties in Caen Street. Other vulnerable locations include a primary school, police station, youth hostel, library, parish council offices, health centre and day centre. During the summer there's an influx of visitors, who are also vulnerable because they are unfamiliar with the flood risk and may not speak English.

Braunton has a long history of flooding, with the earliest recorded event dating back to 1903. The most severe flooding occurred in June 1931, when a localised intense thunderstorm caused flash flooding.

"The cloud burst and the attendant avalanche of water had the effect of causing the River Caen at Braunton to overflow its banks, and abnormal flooding and severe damage to property was experienced in Braunton, Saunton, Croyde and Georgeham," (Environment Agency flood record).



Braunton during the 2012 floods

The most recent flooding occurred in 2012, when Braunton suffered two flood events on 22 December due to persistent rainfall. At that time, there was no community sand bag However, Ben Byrom, a member of the Community Response Team and owner of West Cross Garage, distributed sand bags his business during the events. from Although Braunton had a Community Emergency Plan, there were problems implementing it during the 2012 floods. The Community Response Team decided to review their plan.



"The original emergency plan was based on theory as we had not experienced a flood in the village at the time of writing the plan" (Ben Byrom, Braunton Community Response Team).

Devon Community Resilience Pathfinder Project

Braunton was included in the Defra funded Devon Community Resilience Pathfinder project. This partnership project, between Devon County Council, Torbay Council, Plymouth City Council and the Environment Agency, worked with 24 communities of different sizes in Devon, to help them build local flood resilience. The five project aims for Braunton were to:

- 1. raise flood awareness,
- 2. help review the Community Emergency Plan,
- 3. help train emergency response volunteers,
- 4. supply community resilience equipment, and
- 5. establish a local flood warning system that would alert the community to the possibility of flooding.

Braunton's community Response Team comprises volunteers from Braunton Caen Rotary Club, parish councillors, residents and local businesses. They immediately saw the advantages of the project's funding and specialist assistance, seizing the opportunity to review the Community Emergency Plan in collaboration with the project and using lessons learned from the 2012 floods.

The Community Response Team was proactive and keen to improve the plan. In a matter of months, the plan was updated, tested and launched.

Flood awareness

The Community Response Team worked alongside the project team to raise flood awareness. Although Ben Byrom believes the Community Emergency Plan will help organise any relief effort, the community must not rely on the plan alone:

"What we need to emphasise is that there needs to be an individual response. The Community Response Team isn't there to sandbag people's houses. It's essential for people who live in the flooding areas to have their own measures in place – have their own stock of sandbags or door boards. People have got to be self-reliant and prepared."

An Environment Agency sandbag demonstration, trained people to <u>sandbag</u> their doors to minimise damage to their properties.

Reviewing the Community Emergency Plan

Devon County Council appointed an emergency planning specialist, to help review the original Community Emergency Plan.

The Environment Agency provided advice to the Community Response Team, including:

 <u>flood warnings</u>, <u>flood forecasting</u> and how these 'triggers' could be incorporated into the Community Emergency Plan



• what actions could be taken <u>before</u>, <u>during and after a flood</u> to help the community stay safe and minimse damage



Community Response Team identifying flood risk locations while reviewing the Community Emergency Plan (Source: North Devon Journal)

Police and Fire and Rescue teams also advised the Community Response Team on emergency response. This has strengthened their relationships with Emergency Responders and both parties know they can call on and support one another to deal with local flood incidents. For example, the Community Response Team shares their local knowledge to advise Emergency Responders on the location of flooded roads or where vulnerable people are.

The review process helped Braunton Community Response Team understand the <u>roles and responsibilities</u> of all the organisations that can help with managing flood risk and emergencies.

"The assistance we received in constructing the existing plan, particularly the flood element, was invaluable. I am confident that we can now provide a more coordinated and controlled response." (Ben Byrom, Braunton Community Response Team).

The project helped Braunton Community Response Team to test their plan. The Community Response Team was given a number of mock flood scenarios, which they were asked to respond to using the Community Emergency Plan. It helped the Community Response Team to familiarise themselves with the plan and identify what already worked well and what needed improvement:

"I was very pleased with the outcome of last week's exercise. It verified the various actions we would need to take as the threat level escalates. It also identified areas of the plan that still need work, such as recruiting additional flood wardens to monitor the level of the river." (Patrick Farrelly, Braunton Community Response Team).

Training



Matt Herdman from the Fire Service delivering a module of the Flood Warden Training to the Community Response Team at Braunton Community College

Devon County Council organised flood warden training, to build confidence and help the Community Response Team to understand flood risk, how it's managed, how to stay safe during flood incidents and how to work alongside Emergency Responders. It was delivered by the Environment Agency, Devon and Somerset Fire and Rescue Service and Charles Richards from Cornwall Community Flood Forum. Charles is also part of a Community Response Team and helped to develop the training.



Community Resilience Equipment

The project funded the provision of community resilience equipment, which includes personal protective equipment such as high visibility jackets, as well as road signs, walkie-talkie radios, sandbags and sandbag hoppers. The equipment list was drawn up as a consequence of writing the Community Emergency Plan.

Community flood warning system

Electronic displays in key locations such as the library alert people to flood warning information. These displays were funded by the project.

Signage

Historically, when people have tried to report watercourse obstructions that might increase flood risk to the Environment Agency, they have been unable to explain the postcode or bridge name. The Community Response Team obtained external funding, so that each bridge now has a sign with the bridge's name, postcode, grid reference and the Environment Agency's phone number on it (0800 807060).

Flood risk management

The Community Response Team's local knowledge has been shared with risk management authorities, to help inform a catchment study for possible additional engineering solutions. Devon County Council's flood risk management team are currently promoting a scheme in the Caen Street area, which includes a pumping station to lift surface water during high river levels. Discussion for ongoing maintenance are currently taking place with the parish council and Community Response Team. Devon Highways are also promoting a scheme in the St Brannocks Hill area to divert surface water off the highway and into the watercourse via a proposed swale.