

Flood Investigation Report

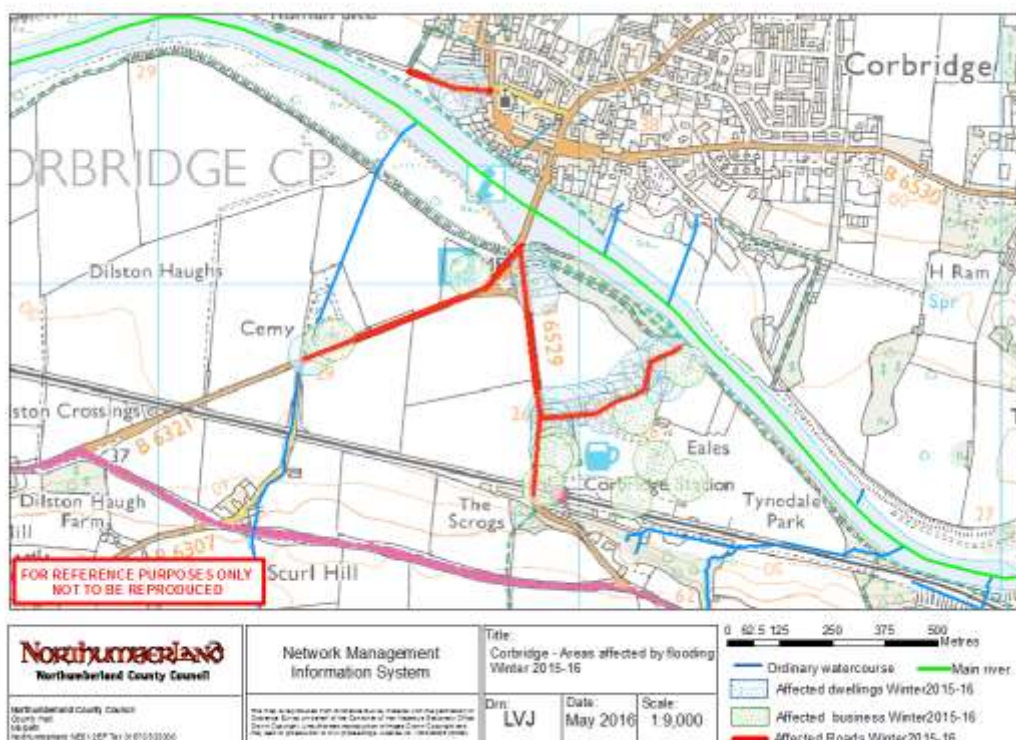
Location: **Corbridge**

Incident Date: **5/12/15**

Source(s) of flooding:

Ordinary Watercourse	Main River	Surface Water	Groundwater	Sewer	Sea	Tidal Lock
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impacts (number)	Residential	Business	Other Buildings	Roads	Critical Infrastructure
	43	12	2	0	0



Description

Corbridge is a village located 4 miles east of Hexham and 16 miles West of Newcastle.

On Friday 4th – Saturday 5th December, Storm Desmond passed to the northwest of the UK bringing severe gales and heavy and persistent rainfall across northern England. As a result, the River Tyne and its tributaries swelled and the defences at Corbridge overtopped.

The flood affected 43 residential properties internally. 12 businesses were also flooded, resulting in some businesses being forced to close for a significant period of time. The caravan park, which is located just past the river's banks, also sustained heavy damage due to the flooding. Families had to be rescued from the upper floors of their homes. The majority of flooding occurred to the southern side of the River Tyne, away from the village centre.

Persistent rain throughout January contributed to surface water issues in the Station Road area of the village.

RMA Actions:		
NCC	<i>Exercised:</i>	<ul style="list-style-type: none"> - Repairs made to highway infrastructure. - Property level resilience grant made available for residents to install defences and make properties more resilient in flooding events. - High Volume Pump and clean-up activity. - Attendance of several community action group meetings to support the understanding of flood recovery progress in Corbridge.
	<i>Proposed:</i>	<ul style="list-style-type: none"> - Investigations into surface water drainage options for the area around Station Road and the Stanners. Options to be appraised and preferred options identified for further investigation.
EA	<i>Exercised:</i>	<ul style="list-style-type: none"> - Temporary repairs have been carried out to the flood defences, which will be made permanent in due course. - The impact of the in channel gravel has been modelled and initial results of the model have demonstrated that the gravel, as it exists, would contribute to little or no change to water levels. - Attendance of several community action group meetings to support the understanding of flood recovery progress in Corbridge. - Engagement with the local community and the Parish Council through regular joint communications, working in partnership with NCC and NW. - Completed an initial economic assessment following the floods to see if future flood risk management improvement works would be cost beneficial.
	<i>Proposed:</i>	<ul style="list-style-type: none"> - It is recognised that the vegetation on the gravel island can have a bigger impact than the actual level of the gravel. It is proposed to remove the vegetation from the gravel island, to improve movement of water during high flows. - Continued engagement with Corbridge Flood Action Group, and provide ongoing support to the community to review their Community Flood Action plan. - Invite Corbridge Flood Wardens to attend the 2016 Flood Warden Event in October 2016.
NW	<i>Exercised:</i>	<ul style="list-style-type: none"> - CCTV and cleansing work have been carried out to the sewer network in Corbridge. Sewer outfalls have also been checked to ensure their effective operation in Corbridge. - Met with the EA to discuss whether the maximum water level in Kielder Reservoir can be reduced to provide greater flood water attenuation. - Transferring Kielder Reservoir to a new water resources modelling software (Aquator) in order to determine maximum water level.
	<i>Proposed:</i>	<ul style="list-style-type: none"> - Test using Aquator software to help NW and the EA decide an acceptable maximum water level at Kielder. Any Viable changes to the maximum water level in Kielder Reservoir would be implemented from 1 November 2016.

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Additional supporting information

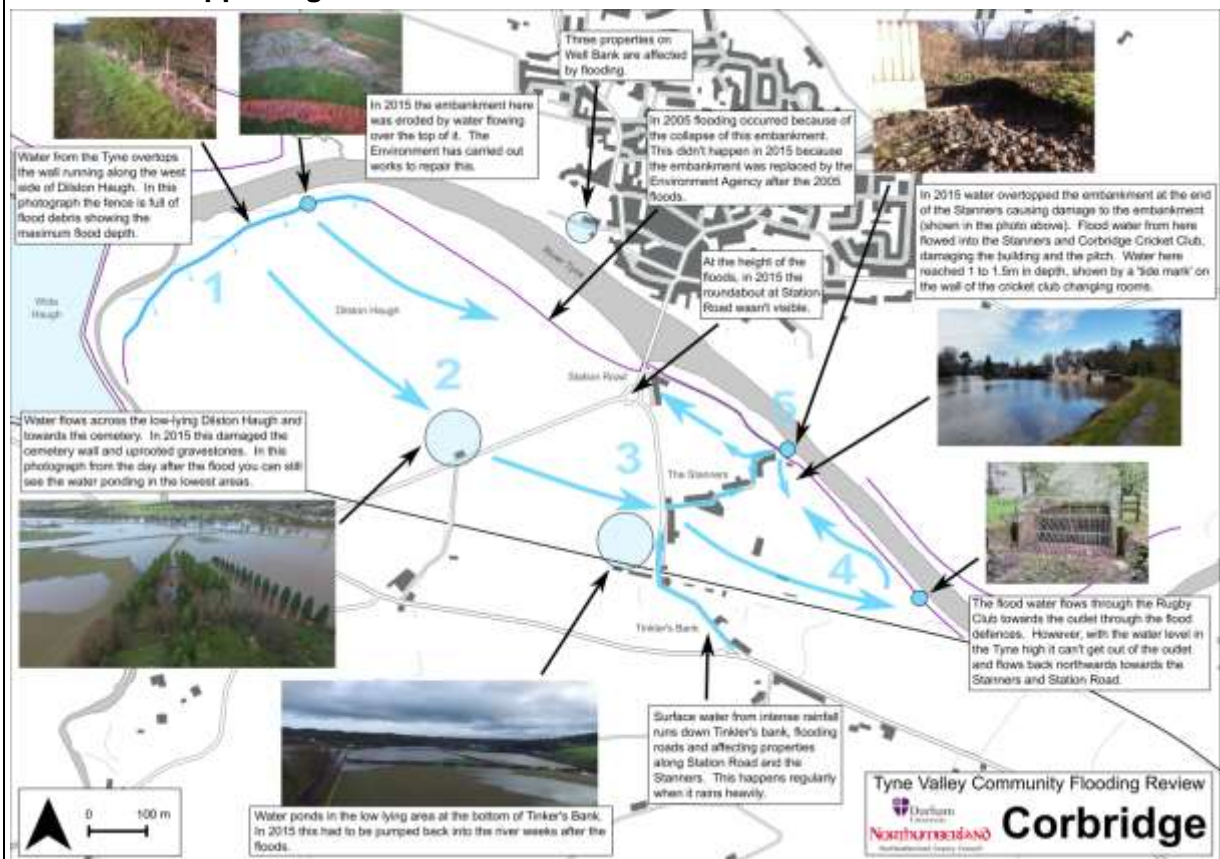


Image 1- Flood mechanisms and observations, Corbridge (Courtesy of Ed Rollason, Durham University)

Sign Off

Drafted by: Lucia Vidal
Approved by: Aaron McNeill

Date

12/08/2016

RMA Notification: EA ☒ NW ☒ Other ☐ (please specify)