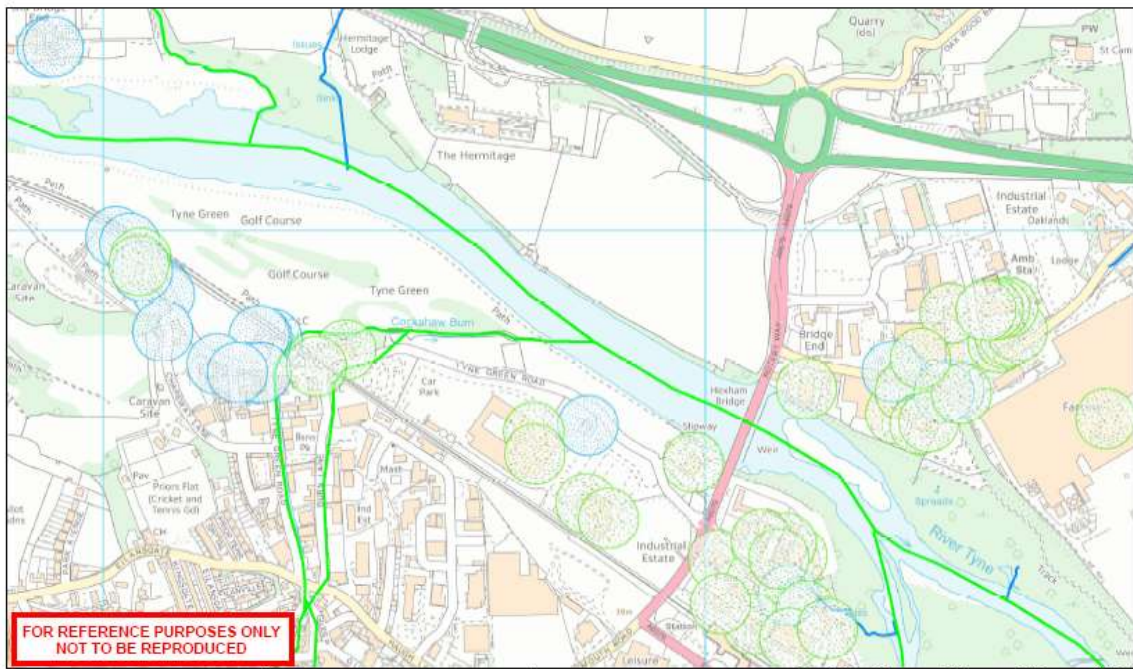


# Flood Investigation Report

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

|                               |                                     |                          |                          |                          |                          |                          |
|-------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <b>Source(s) of flooding:</b> |                                     |                          |                          |                          |                          |                          |
| Ordinary Watercourse          | Main River                          | Surface Water            | Groundwater              | Sewer                    | Sea                      | Tidal Lock               |
| <input type="checkbox"/>      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|                |             |           |                 |          |                         |
|----------------|-------------|-----------|-----------------|----------|-------------------------|
| <b>Impacts</b> | Residential | Business  | Other Buildings | Roads    | Critical Infrastructure |
| (number)       | <b>22</b>   | <b>41</b> | <b>2</b>        | <b>0</b> | <b>0</b>                |



|                                      |                                                                                                                                                                                                                                                                                                                                   |                                                                       |                       |                                      |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------|--------------------------------------|
| <p>Northumberland County Council</p> | <p>Network Management Information System</p> <p><small>This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown Copyright. Unauthorised reproduction in any form is prohibited. Licence no. 100049541 (2006)</small></p> | <p>Title: Low Prudhoe - Areas affected by flooding Winter 2015-16</p> |                       | <p>0 62.5 125 250 375 500 Metres</p> |
|                                      |                                                                                                                                                                                                                                                                                                                                   | <p>Dr: LVJ</p>                                                        | <p>Date: May 2016</p> |                                      |

## Description

Hexham is a market town located approximately 25 miles west of Newcastle upon Tyne on the south bank of the River Tyne. It has a population of over 11,000.

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 overtopped defences.

The river spilled onto the golf course and flowed through the Tyne Green rail underpass, flooding the houses and the caravan park on Tyne Green.

The Bridge End Industrial Estate, on the north bank of the Tyne, and the Tyne Mills Industrial Estate, on the south bank, also sustained heavy flooding. At Bridge End, the water overtopped the flood bank reaching depths between 2 inches to 2 feet. At Tyne Mills, the average depth was 150mm.

Overall 22 residential properties and 41 businesses were affected by the flooding.

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RMA Actions:</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <i>Exercised:</i>                        | - Property level resilience grant made available for residents to install defences and make properties more resilient in flooding events, including exploring the possibility of providing a flood gate at Tyne Green.                                                                                                                                                                                                                                                                                                           |
| <b>NCC</b>                               | - Rest centre opened on standby.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <i>Proposed:</i>                         | - To carry out investigations in several of the affected areas in Bridge End Industrial Estate and Tyne Green.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <i>Exercised:</i>                        | - Progressed working with NCC and NW to provide a flood gate at the Tyne Green underpass.<br>- Engagement with the local community and Parish Council through regular communications.<br>- Completed an initial economic assessment following the floods to see if future flood risk management improvement works would be cost beneficial.                                                                                                                                                                                      |
| <b>EA</b>                                | <i>Proposed:</i><br>- Review of Flood Warning Service following Tyne Valley Modelling Review.<br>- Continue to progress delivery of the Tyne Green defence, using contributions from Tyne Green residents, to hopefully deliver the scheme before the end of the financial year.<br>- Invite the Hexham Flood Wardens to attend the 2016 Flood Warden Event in October 2016.<br>- Continued engagement with Hexham Flood Action Group, and provide ongoing support to the community to review their Community Flood Action plan. |
| <i>Exercised:</i>                        | - Progressed working with the EA and NCC to deliver the Tyne Green defence scheme.<br>- Met with the EA to discuss whether the maximum water level in Kielder Reservoir can be reduced to provide greater flood water attenuation.<br>- Transferring Kielder Reservoir to a new water resources modelling software (Aquator) in order to determine maximum water level.                                                                                                                                                          |
| <b>NWL</b>                               | <i>Proposed:</i><br>- 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.                                                                                                                                                                                                                                                                                       |
| <b>Other</b>                             | <i>Exercised:</i><br><i>Proposed:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Additional supporting information</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                                                                                                                                        |                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>Sign Off</b><br>Drafted by: Lucia Vidal<br>Approved by: Aaron McNeill                                                                               | <b>Date</b><br>12/08/2016 |
| <b>RMA Notification:</b> EA <input checked="" type="checkbox"/> NW <input checked="" type="checkbox"/> Other <input type="checkbox"/> (please specify) |                           |