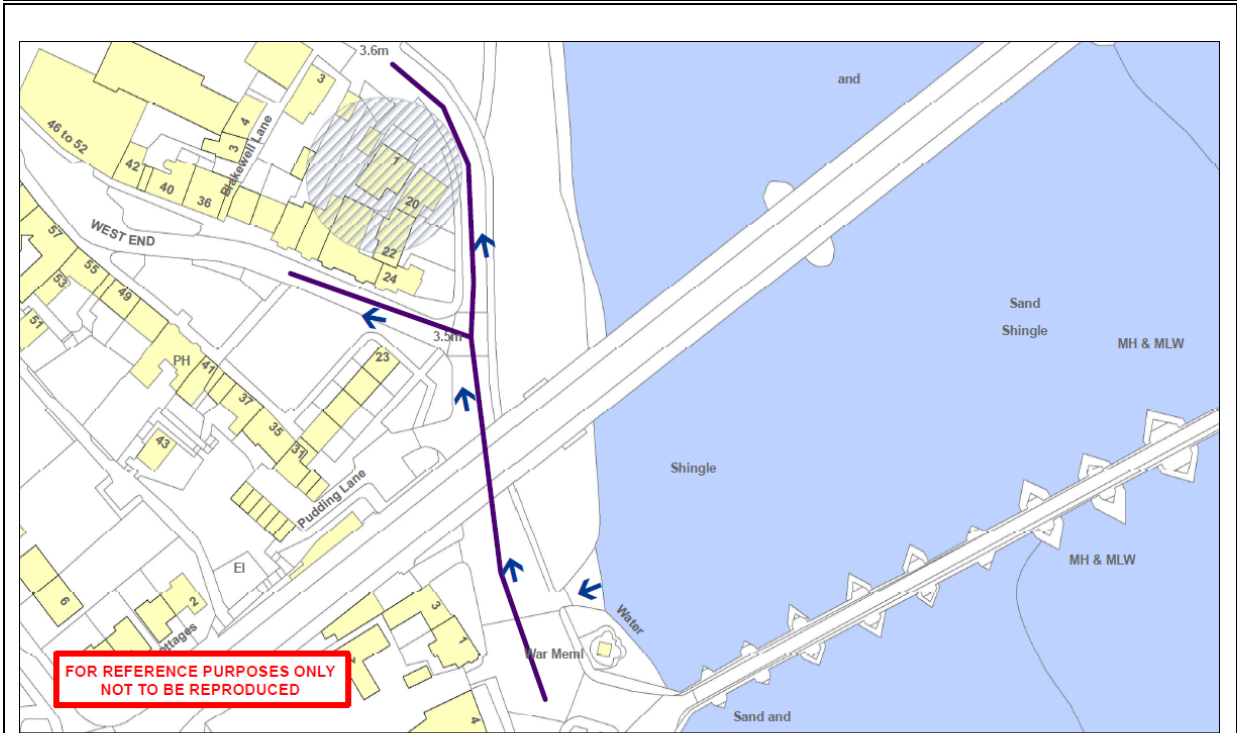


Flood Investigation Report

Location: **Tweedmouth** Incident Date: **05/12/13**

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

Impacts	Residential	Business	Other Buildings	Roads	Critical Infrastructure
(number)	1	0	0	2	0



<p>Northumberland County Council County Hall Morpeath Northumberland NE61 2EF Tel: 01670 533000</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 infringes Crown Copyright and may lead to prosecution or civil proceedings. License no. 100049948 (2009).</small></p>	<p>Title: Tweedmouth tidal surge event 5 December 2013</p>			<p>Legend</p> <ul style="list-style-type: none"> Roads Affected Area Affected Flow Direction 	<p>N</p>
		<p>Dm: DG</p>	<p>Date: 05/09/2014</p>	<p>Scale: 1:1,075</p>		

Description

Tweedmouth is located in the very north-east corner of Northumberland on the south bank of the river Tweed. The area affected by the tidal surge is located near the Royal Tweed Bridge.

The tidal surge event on the 5th December 2013 coincided with a spring tide resulting in sea levels along the east coast reaching their highest in 60 years. As the sea level approached its peak at approximately 16:30, water began to flood Blakewell Street from the boat slipway to the south of the street. There are also numerous outfalls without tidal flaps entering the River Tweed, which allowed the rising water to enter the drainage systems resulting in surcharging manholes. The roads along Blakewell Street and West End were affected by the flood waters and one property is known to have suffered internal flood damage. As the tide began to ebb flood waters retreated within an hour.

Despite the event being of such low probability Blakewell Street will be at increased risk as mean sea level rises into the future.

RMA Actions:

- Exercised:*
- Carried out Flood Investigation Report.
 - Repair and Renew Grant property level protection.

- NCC** *Proposed:*
- Installation of a demountable flood barrier across the boat slipway.
 - Installation of tidal flaps on existing outfalls.

- EA**
- Exercised:*
- Further detail has been added to flood alert texts.
- Proposed:*
- Discussion between the Environment Agency and Flood Forecasting Centre regarding changing the Flood Guidance Statements when there have been flood alerts issued in the County.
 - EA to carry out investigation in how they forecast in the future to provide more consistent information with regards to; height of tidal surge, the issuing of warnings etc.

- NWL**
- Exercised:*
- Proposed:*
- Investigation into issues of surcharging sewers

- Other**
- Exercised:*
- Proposed:*

Additional supporting information:**Sign Off**

Drafted by: David Green, Graduate FCERM Engineer
 Approved by: Trevor Dixon, Flood and Coastal Erosion Risk Manager

Date
 14/01/15

RMA Notification: EA NWL Other (please specify)