Summer 2012 Flooding in Newcastle upon Tyne

A report on the experiences of residents and non-residential property managers
Revision Schedule

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<td>0</td>
<td>Oct 2012</td>
<td>Initial draft</td>
<td>LG</td>
<td>JR</td>
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<td>1</td>
<td>Jun 2013</td>
<td>Final report</td>
<td>RJ</td>
<td>JR</td>
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<tr>
<td>2</td>
<td>July 2013</td>
<td>Amendments to final report</td>
<td>RJ</td>
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If you need this information in another format or language, please phone 0191 2787878 or e-mail flood.management@newcastle.gov.uk.

Acknowledgements:

This report was produced by
Total Research and Technical Services
Newcastle City Council
www.newcastle.gov.uk

The information provided by those residents and businesses who responded to the survey, especially those who sent in additional information and photographs of the flooding, is gratefully acknowledged.
Executive Summary

On 28 June 2012, 50mm rain fell in around 2 hours. For Newcastle, this was equivalent to the expected rainfall for the whole month of June. This, and further rainfall in early August, caused widespread, localised flooding incidents across the city. Further heavy rainstorms continued throughout the remainder of the year.

To help the City Council and other agencies to understand the full extent and impact of the recent flooding, a survey of more than 12,000 residential properties was undertaken. Almost 3000 responses were received, the findings of which are presented in this report.

We now know that over 1,200 properties (including homes, businesses, schools and other non-residential properties) were affected by the summer 2012 flooding in Newcastle, with over 500 homes being flooded internally. Many residents experienced the additional difficulties associated with having to move out of their homes while repairs took place, or not having flood insurance in place.

Prior to the summer 2012 flooding, a significant amount of work had already been carried out to assess the risk of flooding in Newcastle and identify mitigation options. Some locations, generally along the Ouseburn, have already benefitted from flood mitigation measures put in place by the Council, Northumbrian Water, DEFRA and/or the Environment Agency. However, the flooding in summer 2012 has identified approximately 100 locations across the city where further investigations are needed. The flooding experienced at Newburn due to a collapsed culvert is acknowledged but is a separate issue and hence is not covered within this report.

As a Lead Local Flood Authority, under the Flood and Water Management Act 2010 the Council has a duty to investigate flood incidents. We also have a strategic role in managing the risk of flooding from ‘local sources’, including surface runoff, groundwater and flooding from ordinary watercourses and are continuing to work with the Environment Agency and Northumbrian Water to try and manage the risk of future flood damage from all sources across the city.

A Local Flood Risk Management Strategy is currently in preparation. This will set out how the City Council, residents, communities, businesses and other risk management stakeholders will work together to manage the risk of flooding in Newcastle. A draft will be available for consultation later this year.

Newcastle City Council has allocated £3 million for 2013/14 and 2014/15 for capital works to help reduce the risk of flooding across the city. The responses from the questionnaire are being used to prioritise future investigations and help develop a programme of works that will benefit residents, businesses, public buildings and major transport infrastructure at risk of future flooding.
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1 Introduction and Key Findings

The summer of 2012 was the wettest summer in 100 years, causing much of the ground surface to become saturated with water.

On 28 June 2012, 50mm rain fell in around 2 hours. For Newcastle, this was equivalent to the expected rainfall for the whole month of June. On the 5 August, 40mm rain fell in just an hour and a half. These events caused widespread, localised flooding incidents across the city.

On becoming aware of a flood in its area, Newcastle City Council (NCC) is required by the Flood and Water Management Act, to the extent that it considers necessary or appropriate, investigate:

- which risk management authorities have relevant flood risk management functions and;
- whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.

In Newcastle, the principal authorities with responsibility for flood risk management are:

- Newcastle City Council for flooding from surface runoff (e.g. from roads or grassed areas), groundwater or other smaller watercourses.
- Northumbrian Water for sewer flooding
- Environment Agency for flooding from the Tyne or the Ouseburn;

Which risk management authorities have relevant flood risk management functions depends on the source and nature of the flooding. Due to the widespread nature of the flooding that occurred on 28 June 2012, it was decided that a survey was the most efficient way to collect data and record information about the flooding that occurred.

Over 12,000 questionnaires were issued and almost 3,000 residents responded to this survey, telling us about the flooding in their street and/or to their property. Many also took the opportunity to telephone and send in photographs. From this information we are able to geographically map those areas where flooding was most widespread and severe.

We now know that:

- Around 500 properties suffered internal flooding to the house.
- In many other cases, gardens, driveways or garages were flooded.
- When flooding occurred, it happened very quickly. The vast majority of flooding took place within just one hour.
- Outside properties, flood water typically rose up to the level of air bricks.
- Many residents chose not to report the flooding in their street until the survey, but those who did most often contacted the City Council.
- Many residents (66% of those who were flooded) were flooded for the first time.
- Around 200 properties that were flooded internally had been affected by flooding on previous occasions.
• One in every 5 residents whose property had been flooded internally had to move out of their property while repairs took place.
• Just under 80% of those residents whose property was flooded internally had insurance against flood damage.

An accompanying survey of flooding to non-residential properties - including schools, shops, leisure facilities and other non-residential premises - was also undertaken, from which the following key messages emerged:

• Over 50 non-residential properties were affected by the flooding, more than half of which had been affected by flooding on previous occasions.
• Cellar/basements, offices, store rooms and electrical services were most often affected by flooding.
• When flooding occurred, it happened very quickly. The majority of flooding took place within half an hour.
• Around 40% of non-residential properties affected by flooding were temporarily forced to close.
• Around half of non-residential properties affected by the flooding had insurance for damage to stock or loss of revenue.
• Many non-residential property managers chose not to report the flooding in their street until the survey, but those who did, most often contacted the City Council.

The information collected through the responses to the survey will help the City Council, Northumbrian Water and the Environment Agency plan to reduce the risk of flood damage in the future. It is being used to prioritise investigations that will identify appropriate measures to mitigate the risk of flooding.
2 Methodology

The primary aim of the research was to gather information on the geographical spread of flooding throughout the city, and its impact on residents and non-residential properties.

Over 12,000 questionnaires were hand-delivered to residents throughout the city from July to August 2012. Properties were selected based on those streets in which reports of flooding had been made either to Envirocall, City Council officers or councillors, or the Tyne & Wear Fire & Rescue Service. Wherever possible, whole streets were targeted with questionnaires, even if only one or two properties in the street reported flooding. This enabled the most complete possible picture of flooding to be composed. The questionnaire was also made available on the Let’s Talk Newcastle website.

An additional survey of non-residential properties where reports of flooding had been received was undertaken at the same time. Approximately 350 questionnaires were hand delivered to non-residential property managers in August 2012. This questionnaire was also distributed electronically by NE1 (an independent business led initiative to champion Newcastle city centre) to a selection of businesses in the city centre. Properties included public houses, retail outlets, leisure centres, schools, libraries, medical practices, hotels, garages, charities, letting agents and museums.
3 Results

3.1 Residential research findings

Just under 3000 residents returned a questionnaire – a response rate of approximately 23%. The implication is that the remaining properties - in the context of their decision not to return a questionnaire – were not affected by the flooding. It is important to recognise however that this assumption will not always be correct. The number of individual responses from each ward, together with further information about the effects of the flooding as discussed below in Section 3.1.1 is presented in Appendix A.

3.1.1 Properties affected by the flooding

Of those residents who returned a questionnaire, 42% or 1,227 residents indicated that their property was affected by flooding, either externally or internally. Appendix A shows how many respondents from each ward indicated that their property had been affected by flooding.

Where residents reported that their property had been affected by flooding, they were asked to indicate on a diagram which areas of their property were affected. Flooding was characteristically to the front of properties (62%), to pavements (49%) and to roads (46%). Around a third of residents indicated that their house, garage or back garden had been affected, as shown in Table 1 below.

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of residents who indicated that this area of their property was affected</th>
<th>Percentage of residents who said their property was affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front of property / front garden</td>
<td>757</td>
<td>62%</td>
</tr>
<tr>
<td>Pavement</td>
<td>600</td>
<td>49%</td>
</tr>
<tr>
<td>Road</td>
<td>557</td>
<td>45%</td>
</tr>
<tr>
<td>Back of property / back garden</td>
<td>437</td>
<td>36%</td>
</tr>
<tr>
<td>House</td>
<td>427</td>
<td>35%</td>
</tr>
<tr>
<td>Garage</td>
<td>386</td>
<td>31%</td>
</tr>
<tr>
<td>Shed</td>
<td>196</td>
<td>16%</td>
</tr>
<tr>
<td>Property boundary</td>
<td>33</td>
<td>3%</td>
</tr>
</tbody>
</table>

Residents whose property was affected by flooding were also asked to indicate on a diagram how far the water rose up the outside of their property. The results are shown in Table 2 on the following page. Many residents did not specify the depth of
water outside their property, but of those who did, water typically was below or at the level of the air bricks.

Table 2. Depth of water outside properties

<table>
<thead>
<tr>
<th>Depth of water outside the property</th>
<th>Number of residents</th>
<th>Percentage of residents whose property was affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below or at the level of the air bricks</td>
<td>446</td>
<td>36%</td>
</tr>
<tr>
<td>Within the first quarter of the front door</td>
<td>195</td>
<td>16%</td>
</tr>
<tr>
<td>Halfway up the front door</td>
<td>16</td>
<td>1%</td>
</tr>
<tr>
<td>Three-quarters of the front door or higher</td>
<td>3</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Did not specify</td>
<td>567</td>
<td>46%</td>
</tr>
</tbody>
</table>

3.1.2 Internal property flooding

The depths of water internal to properties are given in Table 3 below. For half the residents whose property was affected by flooding, water did not enter the house, indicating external property flooding. However, over 500 residents indicated their property was flooded internally, and this information is investigated further throughout this report due to the increased impact on residents. The number of residential properties experiencing internal flooding is shown in Appendix A.

Table 3. Depth of water internal to properties, where residents reported their property had been affected by flooding.

<table>
<thead>
<tr>
<th>Depth of water inside the property</th>
<th>Number of residents</th>
<th>Percentage of residents whose property was affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water did not enter property</td>
<td>623</td>
<td>51%</td>
</tr>
<tr>
<td>Water was under the floor</td>
<td>160</td>
<td>13%</td>
</tr>
<tr>
<td>Water was above the floor</td>
<td>171</td>
<td>14%</td>
</tr>
<tr>
<td>Water was above the skirting boards</td>
<td>191</td>
<td>16%</td>
</tr>
<tr>
<td>Did not specify</td>
<td>82</td>
<td>7%</td>
</tr>
</tbody>
</table>

The majority of residents indicated their property did not have a cellar or basement. However, over 100 residents indicated that water had got into their cellar or basement. The number of properties in each ward where this occurred is presented in Appendix A and shows most are within wards with older housing stock, where cellars and basements are more likely to be present.
Most residents whose property was affected by flooding remained in their homes. However, 110 residents had to move out of their property to accommodate repairs. This is equivalent to around one in every five residents whose property was flooded internally.

Whether residents had to move our of their homes can be linked to the depth of the flooding experienced; the majority of residents who had to move out indicated their property was flooded to a depth above the skirting boards. It can also be linked to whether residents had flood insurance in place, and whether that insurance covered the cost of alternative accommodation while repairs took place. Further analysis of this point is however beyond the scope of this report.

Of the residents whose properties were flooded internally, the majority (74%) were insured against flooding, as shown in Table 4 below. However, 20% of residents whose properties were flooded internally were not covered by flood insurance. The number of these residents in each ward is shown in Appendix A.

### Table 4. Properties flooded internally but with flood insurance in place

<table>
<thead>
<tr>
<th></th>
<th>Number of residents whose property was flooded internally</th>
<th>% of residents whose property was flooded internally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property was insured against flooding</td>
<td>387</td>
<td>74%</td>
</tr>
<tr>
<td>Property was not insured against flooding</td>
<td>103</td>
<td>20%</td>
</tr>
<tr>
<td>Did not specify</td>
<td>32</td>
<td>6%</td>
</tr>
</tbody>
</table>

#### 3.1.3 Repeat Flooding Incidents

Over 400 or approximately one third of residents whose property was affected by flooding (internally or externally) said their property had also been affected by flooding on previous occasions. Figure 1 on the following page shows the years in which previous flooding occurred. Many residents indicated their property had been affected by flooding previously but stated they couldn’t remember when. Nearly 100 other residents noted that their property had been affected on multiple previous occasions prior to or during 2012.

For residents whose properties were affected by internal flooding, 311 or 61% indicated that this was the first occurrence during the time they had lived in the property. In contrast, 202 residents or 39% of those whose properties were flooded internally indicated their property had been affected by flooding on previous occasions. The number of these properties in each ward is presented in Appendix A.

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1 The degree to which properties were affected by flooding on previous occasions is unknown, i.e. it is not known whether the property was flooded internally, or experienced external flooding only. Those properties that have experienced multiple episodes of internal flooding are clearly a priority for further investigation.
3.1.4 Awareness of the flooding

As well as the residents whose properties were affected by the flooding, more than 700 additional residents provided information about flooding that affected the streets in which they lived. In total, 1961 or 68% of respondents indicated in some way that they were aware of flooding in their street.

Where residents were aware of flooding in their street, this was characteristically to the road (80%), to footpaths (70%), and to a lesser extent to buildings/properties (55%) and/or verges/grassed areas (42%).

The most common sources of flooding indicated by residents were roads or manholes, followed by playing fields/grassed areas and neighbouring properties, as shown in Figure 2 on the following page. The main other sources of flooding referred to were drains (highway gullies, building drainage systems, blocked drains) and ‘torrential’ rain, including drains being unable to cope with the volume of water. Many residents indicated multiple sources of flooding, but 13% were unsure or did not specify where the water came from.
Residents also stated that the flooding happened very rapidly, typically within 30 minutes (53% respondents) or 30 minutes to 1 hour (28% respondents). Thus, in over three quarters of cases, residents indicated that the flooding happened within 1 hour. The flood water generally drained away naturally, but in 9% of cases water had to be pumped out, shown in Figure 3 below.

Figure 1. (a) How quickly the flooding happened and (b) how long the water took to drain away.
Over half (62%) of residents who had experienced flooding to their property or who were aware of flooding in their street, did not report this to anyone. Where the flooding was reported, this was typically to Newcastle City Council Officers or Councillors (18%), Envirocall (13%) or Northumbrian Water (10%), as shown below in Figure 12. Others reported flooding to the Fire Brigade, insurance companies, Places for People, Home Serve, Your Homes Newcastle, Housing Offices, Newcastle City Council Officers, Newcastle University, private housing developers and housing associations, residents’ action groups, energy companies, landlords and caretakers.

Figure 2. Who the flooding was reported to

3.2 Non-residential research findings

A similar questionnaire targeted at non residential properties was also produced; 350 copies were hand delivered to non-residential properties across the city in August 2012. This questionnaire was also distributed electronically by NE1 to businesses in the city centre. Properties included public houses, retail outlets, leisure centres, schools, libraries, medical practices, hotels, garages, charities, letting agents and museums.

In total, 72 property managers returned a questionnaire – a response rate of just over 20%. The implication is that the remaining properties - in the context of their decision not to return a questionnaire – were not affected by the flooding. It is important to recognise however that this assumption will not always be correct.
3.2.1 Properties affected by the flooding

75% of those property managers who did return a questionnaire (54 in total) indicated that their property was affected by flooding, while 25% reported that their property was unaffected. The highest concentration of non residential properties affected by flooding was in Westgate ward in the city centre, as presented in Appendix A.

Where property managers reported that their property was affected by flooding, the areas affected are given in Table 6 below. A variety of areas were affected by flooding, including sports halls, classrooms, reception areas, bar/restaurant areas, gallery spaces and bedrooms of service users. This reflects the variety of non-residential properties affected by the flooding.

Table 5. Areas of non residential properties affected by flooding

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of properties</th>
<th>% Non-residential properties affected by the flooding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellar / basement</td>
<td>23</td>
<td>43</td>
</tr>
<tr>
<td>Office</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>Store area</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>Sales area</td>
<td>15</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>56</td>
</tr>
<tr>
<td>Did not specify</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Half of those property managers where the property was affected by flooding also indicated that at least one utility service had been affected. The most common utility service affected was electricity (33% of properties affected). Other services that were affected in a minority of properties included telephone systems, fire alarms, water and drainage.

Among non residential property managers where the property was affected by flooding, just over 40% said that their property had to temporarily close and 8% moved out of their property to accommodate repairs.

48% of those property managers whose property was affected by flooding were insured against damage to stock or loss of revenue. 26% were uninsured for this, and 26% were unsure, as shown in Figure 5 on the following page.
Approximately one-third (31%) of property managers whose non-residential properties were affected by flooding, indicated that this was the first occurrence of this. In contrast, 54% indicated previous incidents of flooding and 15% were unsure.

Where properties had been previously affected by flooding, most either could not remember the exact date or had been flooded on multiple occasions, including issues related to building drainage. The most commonly mentioned occasions for previous flooding incidents were 2010, 2011 and earlier in 2012.

### 3.3.2 Awareness of the flooding

As well as those property managers whose properties were affected by the flooding, an additional 10 responses provided information about flooding in the street. In total, 64 or 86% of respondents from non residential properties indicated in some way that they were aware of flooding in their street. This was characteristically to the roads (64% respondents), to footpaths (56% respondents), to buildings or properties (59% respondents) and to a lesser extent verges or grassed areas (13% respondents).

The most common sources of flooding indicated were roads and manholes, followed by playing fields/grassed areas and neighbouring properties, as shown in Figure 10 below. The main other sources of flooding referred to were drains (highway gullies, building drainage systems, blocked drains) and ‘torrential’ rain, including drains being unable to cope with the volume of water. Many respondents indicated multiple sources of flooding, but 13% were unsure or did not specify where the water came from.

Similarly to responses from residential properties, roads and manholes were the most common sources of flooding indicated from respondents who were aware of flooding in their street (63% and 55% respectively). Again, as shown below in Figure 6 below, the flooding occurred very rapidly – typically within 30 minutes (52%) or 30 minutes to 1 hour (17%).
Figure 6. How quickly the flooding happened.

The floodwater generally drained away but in 14% cases where respondents were aware of flooding in the street, the water had to be pumped out. In 30% cases, respondents were unsure how long the water took to drain away or did not specify.

Similarly to residential properties, over half of all non-residential property managers (58%) who were aware of flooding to their property and/or in their street, did not report this to anyone. When flooding was reported this was most often to Newcastle City Council Officers or Councillors (19%). Others reported the flooding to their building managers, head offices or insurance companies.
3.3 Additional comments about the flooding and its impact

Nearly half of residents and non-residential property managers who responded to the survey provided additional comments and information about the flooding and its impact. Many also telephoned to express their views and/or ask for help or advice.

- Those residents whose homes were affected by floods often commented on the emotional stress of their flooding experience, and how this had impacted upon their lives. Many talked of the damage to their personal possessions and the stress caused by losing precious items. Worries were also evident on the impact of both past and future flooding and the potential effect of this on the cost of home insurance policies, giving fears to increases in insurance premiums and excesses that residents felt unable to afford. In some cases these increases had materialised leaving home owners uninsured. Some non-residential property managers highlighted the impact of the flooding on their service delivery.

- Directly relating to the flooding, some residents spoke of deterioration in their health and wellbeing. Common ailments caused by dampness, such as chest infections and asthma were noted and some residents reported they were now feeling depressed. Many residents, particularly older people, expressed feelings of anxiety and fear at the prospect of rain, especially if they had to leave home when rain was forecast. A very small minority of residents, who, over a period of years had experienced multiple flooding incidents to their properties, commented they were experiencing feelings of depression and having no one to turn to for help.

- Where properties were flooded internally, some residents experienced the inconvenience and disruption of having to move out of their homes for weeks or even months as their houses were deemed unliveable at that time. Conversely, other residents who were not given the option of temporarily moving out of their property felt that they had been given little assistance.

- Other residents experienced flooding in their gardens, with descriptions of lawns becoming saturated with water and taking hours or days to drain away, and garden sheds or garages flooded causing damage to contents.

- Many residents felt the most common cause of flooding in residential areas was due to poor and irregular maintenance of the drains and gullies, particularly if they didn’t see this happening. A further cause of the flooding felt to be lack of drainage, or old and inadequate drainage. During periods of heavy rainfall, drains and gullies were often noted as filling quickly and overflowing. Residents also felt that many drains were either Victorian or constructed during the 1950’s and thus not equipped to deal with heavy rainfall.

- To remedy these perceived problems, a number of residents suggested regular deep cleaning of drains, accompanied by a facility for the public to be able to report blocked drains\(^2\) which involved the public spotting blocked

\(^2\) Residents should call Envirocall on 0191 278 7878 to report a blocked gully or drain – this will then be inspected and attended to within one working day of notification.
drains or gullies and immediately reporting them to be cleaned, preventing a further build-up of debris.

- A small number of residents voiced concerns regarding new build properties, and possible problems that new infrastructure was felt to cause relating to flooding. Some residents noted that when new development was built alongside their properties, problems with flooding occurred. Concerns were also raised regarding building on flood plains and in green belt areas. New roads or resurfaced roads with speed humps were also felt by some residents to be contributing to excess water.

- Many residents noted their problems with flooding were ones which they had not been previously encountered. Blocked drains, lengthy sustained periods of rain and the Council failing to take responsibility were all reasons that were noted by residents as to why.

- Some residents talked of repeat flooding problems, encountered yearly, with little available help. It was felt by some that the flooding scenario was one which the Council, MP’s and Councillors knew about, but did very little to help. Problems experienced ranged from unavailable service telephone numbers, to slow response rates to call outs, and a lack of sandbags.

- However, many other residents praised Newcastle City Council and other agencies for the delivery of their services or received additional support from their neighbours.
3.4 Help and advice requested

Around 400 respondents requested additional assistance or advice relating to flooding via their questionnaire responses. The most frequent requests focused on tackling perceived issues with drains. This was followed by a need for sandbags, anti-flooding devices, general advice and information and long-term solutions. However, it should be noted that each of these - including drainage issues - was requested by less than 5% of all residents who responded to the questionnaire.

- In terms of drainage there are a number of resident perceptions that drains cannot cope with heavy rain. For some this is felt to necessitate a more intensive and more frequent maintenance regime.

- Both residents and non-residential property managers often regarded sandbags as an effective anti-flooding measure. Advice was requested relating to the source of their potential purchase together with, for some, the expectation that these should be provided as a statutory requirement, free of charge.

- Some felt that they needed support with funding to repair flood damage, whilst others requested advice and visits from specialist officers and agents for business properties. Residents also requested information about, and assistance with, flood protection. A number of resident queries were passed on to Northumbrian Water, local Councillors and the National Flood Forum for further information. One resident was interested in becoming a community representative.

- For others, a need for long-term, strategic solutions in the wake of repeated flooding was felt to be necessary, along with collaboration between different organisations to reduce the risk of repeated flooding incidents.

During the course of the research a number of telephone calls were taken from residents, with the majority of these simply wanting to speak to someone about the flooding, and subsequently pleased to be sent relevant flood management literature. In contrast, a minority of callers were angry and felt that the Council were doing nothing at all to help with their flooding situation, with some threatening press intervention. A listening ear and reassurance helped the majority of callers.

Some residents were prompted by neighbours to call to express their own concerns on the flooding situation. Power in numbers appeared to be their motive. Other residents contacted the City Council to offer their expertise as to how flooding in their local area and across the City could be prevented.

A further 46 residents made comments at the National Flood Forum Recovery Trailer when it visited Newcastle in August 2012. The most common issues reported were to do with gullies, drainage, sewerage debris, highways disruptions, road closures and insurance claims.
4 Discussion

This research was commissioned in order to gather information on the extent of the flooding and its impact on residents and non-residential properties. When considering the findings of this research, it is important to acknowledge both the strengths and limitations of the data. Undoubtedly the data provides a reasonably good indication of where flooding occurred. However, those streets in which either no residents reported flooding, or in which no residents returned a questionnaire, are not included. Furthermore, where individual residents and non-residential property managers who were affected by flooding chose not to respond, their details remain unknown and unmapped. The actual impact and extent of the flooding in Newcastle is likely to be higher than stated in this report.

It is also important to acknowledge that because the survey was targeted towards individual properties, this report does not consider other impacts of the flooding, for example on infrastructure and transport networks. Significant damages to highways were caused, with cost estimates for repairs as high as £8 million. Many people also experienced severe disruption due to flooding on roads and public transport services being delayed or cancelled.

The research however goes beyond simply identifying flood locations, by providing important information about the source, nature and degree of the flooding experienced. The research also covered the impact of the flooding, for example noting where residents had to move out of their homes to accommodate repairs, or whether their homes were insured against flooding. The concerns and needs of residents and non-residential property managers have also been investigated.

Under Section 19 of the Flood and Water Management Act, on becoming aware of a flood in its area, Newcastle City Council is required by to investigate, to the extent that it considers necessary or appropriate,

- which risk management authorities have relevant flood risk management functions and;
- whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.

The primary source of the flooding identified by residents was runoff from roads, followed by flooding from manholes and runoff from playing fields or other grassed areas. Very few residents indicated streams or burns as contributing to the source of the flooding.

The highway drainage system, together with public sewers and other drains are designed to cope with a certain amount of rainfall. When heavy storms occur, such as those experienced in Newcastle in June and August 2012, the capacity of the drains and sewers will be exceeded. When the drains and sewers are full, or if the ground is saturated, any subsequent rainfall will pond in low lying areas, or flow over the ground surface until it reaches a river or the sea. This is known as surface water flooding, and Newcastle City Council is the relevant risk management authority.

Where residents have indicated flooding from sewers or manholes, Northumbrian Water is the relevant risk management authority. We have shared the locations of streets where flooding from sewers or manholes was reported with Northumbrian Water to enable them to investigate further.
In the minority of cases where residents have indicated flooding from rivers, streams or burns, the relevant risk management authority will be the Environment Agency for the Ouseburn or the Tyne and Newcastle City Council for any other watercourses.

Since the widespread flooding experienced across Newcastle in June and August 2012, City Council officers have attended ward committee and special ward meetings, and provided individual advice to a number of residents. A webpage has also been set up at www.newcastle.gov.uk/floodmanagement where residents can get additional information and guidance on flooding issues.

The National Flood Forum, which is an independent charity dedicated to supporting and representing communities and individuals at risk of flooding, visited Newcastle in August 2012 at the council’s request to provide additional support for residents affected by the flooding.

Approximately 100 locations across the city have been identified where further investigations are needed to

- confirm whether the relevant authorities are proposing to exercise their flood risk management functions
- identify the preferred option for managing future flood risk and
- where possible, identify funding to implement solutions.

Newcastle City Council has allocated £3 million for 2013/14 and 2014/15 for capital works to help reduce the risk of flooding across the city. The responses from the survey will be used to prioritise future investigations and help develop a programme of works that will benefit residents, businesses, public buildings and major transport infrastructure at risk of future flooding.

Flooding is a natural occurrence and we cannot prevent it entirely. However, a great deal can be done to manage the risk of flooding and reduce the impacts it causes, by helping people and communities to become more resilient to the effects of flooding. This requires public and private organisations to work closely with residents, communities and each other to understand the issues and identify and implement solutions. Residents also have an individual responsibility to help protect their properties from flooding.

The Flood and Water Management Act also requires Newcastle City Council to produce a Local Flood Risk Management Strategy to help address the risk of flooding across the city – this will set out a clear vision for managing flood risk, reflecting local circumstances such as the level of risk and the potential impacts of flooding. A draft will be available for consultation in 2013. The City Council will continue to work with key agencies and providers to manage flood risk across the city and work to reduce the risk of flooding and the physical and emotional damage it causes.
5 Conclusions and Key Recommendations

The flooding in Newcastle on 28th June 2012 and later in the summer on 5th and 6th August affected properties right across the city. Over 500 homes were flooded along with a number of businesses, schools and other public buildings.

This research has collected large quantities of valuable information about the flooding and its impact. In the majority of cases however, further investigation is needed before we can determine how best to reduce the risk of flooding at individual locations and how we can make the city as a whole more resilient to flooding.

The results of this research will be used to prioritise future work and investigations as part of the City Council’s capital programme to help reduce the risk of flooding across Newcastle. A total of £3 million has been allocated for 2013/14 and 2014/15. In addition, the following key recommendations are proposed:

- **Increase awareness about what to do before, during and after a flood incident, and where to find information and support about flooding issues.**

  This will help people better respond to flooding and reduce the risk of residents developing health issues directly linked to flooding incidents.

  The general public need to be made aware that we cannot control the weather so it is not possible to say “you will never be flooded”. A great deal can be done to manage the risk however and this requires residents/communities to work with public and private organisations.

  A webpage has already been set up at where residents can find relevant information, including advice on protecting their properties, insurance related issues and the contact details, roles and responsibilities of various organisations. This is available at [www.newcastle.gov.uk/floodmanagement](http://www.newcastle.gov.uk/floodmanagement)

  A general information document is in preparation with flood risk management stakeholders and the Institution of Civil Engineers Water Panel. This booklet will be made available to residents and businesses in the City through Ward Meetings, Libraries and Customer Service Centres.

  In particular the City Council needs to make residents aware that sandbags will be used only when a manager has visited a site and to manage a general flood situation, they will not be provided to individual properties on request.

  It is also important to make residents aware that they can use Envirocall to report any blocked gullies, and emphasise the importance of reporting any flooding incidents to the relevant authority (Northumbrian Water for sewer flooding, the Environment Agency for flooding from the Ouseburn or the Tyne and Newcastle City Council for any other issues).
• **Investigate the piloting of a point of contact where residents can ring for advice and support following severe flooding incidents.**

Similar to the above, this will help ensure residents receive timely information and advice following a flood incident. It will also reduce the risk of residents developing health issues directly linked to flooding incidents.

• **Carry out a review of the gully cleansing regime.**

This will help focus resources on areas prone to flooding and identify where efficiencies could be made. It will also investigate options for improving the gully cleansing regime, such as preparing a list for the public when cleansing operations will take place in a street and asking residents to keep parked cars away from gullies at these times.

• **Continue to develop working relationships with Northumbrian Water, the Environment Agency and other relevant organisations.**

This will ensure that we work in partnership to achieve the maximum reduction in flood risk with all available resources, and maximise opportunities to secure joint support and funding for any schemes.

• **Review planning applications for sites that may be affected by flooding or may have an effect on flood risk elsewhere.**

This is an interim measure until the Government introduces guidance for a Sustainable Drainage Approving Body. This is expected to be implemented in April 2014 and will require many development sites to have their drainage systems for managing surface water run-off approved before construction begins.

• **Complete work on the Local Flood Risk Management Strategy.**

This will set out how the City Council, residents, communities, businesses and other risk management stakeholders will work together to manage the risk of flooding in Newcastle. A draft will be available for consultation later this year.

• **Investigate the piloting of a Volunteer Flood Warden system.**

This would help improve communication when a flooding incident is developing, with wardens being available a point of information for both residents and the Council. It could also help ensure blocked gullies or issues on watercourses are reported to the relevant authority.
## APPENDIX A – Residential and non-residential research findings.

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<th>Ward</th>
<th>Number of households in ward (2011 census)</th>
<th>Number of questionnaires sent out</th>
<th>Number of responses</th>
<th>Number of respondents who said their property was affected by flooding</th>
<th>Number of properties flooded internally, water below or above the floor</th>
<th>Number of properties flooded internally, above the floor</th>
<th>Number of properties where the cellar or basement was flooded</th>
<th>Number of respondents who had to move out of their property due to flooding</th>
<th>Number of properties flooded internally, no flood insurance in place</th>
<th>Number of properties flooded internally, property affected by flooding on previous occasions</th>
<th>Number of non-residential properties affected by the flooding</th>
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APPENDIX B – Residential questionnaire
August 2012

If you need this information in another format or language please contact the sender.

Dear Resident

**Recent Flooding in Newcastle**

Following very heavy rain on Thursday 28th June 2012, widespread flooding occurred across Newcastle. We are working with the Environment Agency, Northumbrian Water, YHN and Newcastle University to help us to reduce the risk of future flood damage to the City.

To do this we need to understand the impact on residents of the recent flood, and we need your help to tell us about any flooding in your street. This will help us to build up a picture of where and how flooding occurred across the city, and allow us to plan for the future.

If you have already reported any flooding incidents to Envirocall, Council Officers or your Councillors, or to Northumbrian Water, please still fill in this questionnaire. We will keep your personal details completely confidential but we may share overall statistical information about any findings with the agencies who we are working with.

Please complete and return the attached questionnaire in the reply paid envelope provided (no stamp is needed) by Monday 20th August 2012.

If you would like to speak to someone, please do not hesitate to contact Valerie Dowens on (0191) 2783169. Alternatively, please email your views to: total.research@newcastle.gov.uk. If you have any photographs of the recent flooding that you would like to share with us please also use this address. Photographs will also be really useful to help us build up a picture of the extent of flooding in the city.

We have also set up a website which you may find useful to visit. This can be found at [www.newcastle.gov.uk/floodmanagement](http://www.newcastle.gov.uk/floodmanagement).

Yours Faithfully,

Lisa Grabham
Lisa Grabham

Research Manager
TOTAL RESEARCH
FLOODING IN NEWCASTLE QUESTIONNAIRE

1. Firstly, was your property affected by the recent flooding in Newcastle?
   Yes □  No □

If your property was NOT affected, please go to question 8 on the next page.

2. On drawing A, please circle which area(s) of your property were affected. On drawing B please draw a line to show how far the water rose up the outside of your property.

   Drawing A: Plan View
   Drawing B: Front View

3a. How deep was the water in your property?
   Water did not enter house □  Water was under the floor boards □
   Water was above floor boards □  Water was above skirting boards □

3b. Did any water get into your cellar or basement if you have one?
   I don’t have a cellar/basement □
   Yes □  No □  Unsure □

4. Did you, or will you have to, move out of your property while repairs take place?
   Yes □  No □  Unsure □

5. Was your house insured against flood damage?
   Yes □  No □

6. Has your property ever been flooded before while you have been living there?
   Yes □  No □

7. If yes, please tell us the dates when your property was flooded:
   □ □ □
8. Are you aware of any flooding in your street?
Yes ☐ No ☐

If you are unaware of any flooding in your street please now go to question 16.

9. Which areas of your street were flooded? PLEASE TICK AS MANY AS APPLY
Road ☐ Footpath ☐
Verge/Grassed Area ☐ Buildings/properties ☐

10. Where did the flood water come from?
Rocks ☐ Manholes ☐
Playing Field/Grass Area ☐ Neighbour’s Property ☐
Dene/Burn ☐ Other (Please tell us where) ............
Unsure ☐

11. How quickly did the flooding happen?
In less than 30 minutes ☐ 30 minutes to 1 hour ☐
More than 1 hour ☐ Unsure ☐

12. After the flooding happened, how long did the water take to drain away?
Less than 30 minutes ☐ 30 Minutes to 1 hour ☐
More than 1 hour ☐ Water had to be pumped out ☐
Unsure ☐

13. Did you report the flooding in your property or street to anyone?
Newcastle City Council officers or councillors ☐ Envirocall ☐
Northumbrian Water ☐ Enviroment Agency ☐
Other (please tell us who).................................
14. Is there anything else you'd like to say about the recent flooding and the impact it may have had on you?

15. Do you need any help or advice about the recent flooding? If so, please tell us what kind of help or advice.

16. Finally, please provide us with your details. These will be kept completely confidential and we will not publish any findings which refer to your details or address. We may share the overall statistical information that we collect as part of this consultation with the agencies who we are working with – Northumbrian Water, the Environment Agency and Newcastle University. However, please rest assured that your personal details will NOT be shared in any way.

Title: Mr/Mrs/Ms

Name: ..................................................................................................................

Address: ...............................................................................................................

..................................................................................................................

Postcode: ...........................................................................................................

Contact No: .......................................................... Email: ...................................

Thank you for all of the information you have provided. Please return this questionnaire in the reply paid envelope provided (no stamp is needed) by Monday 20th August 2012.

If you would like to speak to someone, please do not hesitate to contact Valerie Dowens on (0191) 2783169. Alternatively, please visit the website we have set up. This can be found at www.newcastle.gov.uk/floodmanagement. Please email your views and any flood photographs of Newcastle to: total.research@newcastle.gov.uk.
APPENDIX C – Non-residential questionnaire
August 2012

If you need this information in another format or language please contact the sender.

Dear Resident

**Recent Flooding in Newcastle**

Following recent incidents of very heavy rain, widespread flooding occurred across Newcastle. We are working with the Environment Agency, Northumbrian Water, YHN and Newcastle University to help us to reduce the risk of future flood damage to the City.

To do this we need to understand the impact on properties of the recent flood, and we need your help to tell us about any flooding in the area. This will help us to build up a picture of where and how flooding occurred across the city, and allow us to plan for the future.

If you have already reported any flooding incidents to Envirocall, Council Officers or your Councillors, or to Northumbrian Water, please still fill in this questionnaire. We will keep your personal details completely confidential but we may share overall statistical information about any findings with the agencies who we are working with.

Please complete and return the attached questionnaire in the reply paid envelope provided (no stamp is needed) by Monday 20th August 2012.

If you would like to speak to someone, please do not hesitate to contact Valerie Dowens on (0191) 2783169. Alternatively, please email your views to: total.research@newcastle.gov.uk. If you have any photographs of the recent flooding that you would like to share with us please also use this address. Photographs will also be really useful to help us build up a picture of the extent of flooding in the city.

We have also set up a website which you may find useful to visit. This can be found at www.newcastle.gov.uk/floodmanagement.

Yours Faithfully,

Lisa Grabham
Lisa Grabham

Research Manager
TOTAL RESEARCH
FLOODING IN NEWCASTLE QUESTIONNAIRE

1. Firstly, has your property been affected by the recent flooding in Newcastle?
   No    Yes    Date flooding occurred

   If your property was NOT affected, please go to question 10 on the next page.

2. Which areas of your property were affected: Tick all that apply.
   Sales area    Office
   Store room    Cellar/Basement
   Other

3. Did the flooding affect any of these services to the property?
   Electricity    Gas
   Heating    Other

4. Did your business have to close?
   Yes    No    Unsure

5. Did you, or will you have to, move out of your property while repairs take place?
   Yes    No
   If yes, then for how long............

6. Was your business insured for damage to stock or loss of revenue?
   Yes    No    Unsure

7. Was your building insured against flood damage?
   Yes    No    Unsure

8. Has your property ever been flooded before?
   Yes    No    Unsure

9. If yes, please tell us any previous dates when your property was flooded:


10. Are you aware of any flooding in your street?
Yes ☐ No ☐

If you are unaware of any flooding in your street please now go to question 18.

11. Which areas of your street were flooded? PLEASE TICK AS MANY AS APPLY
Road ☐ Footpath ☐
Verge/Grassed Area ☐ Buildings/properties ☐

12. Where did the flood water come from?
Roads ☐ Manholes ☐
Playing Field/Grass Area ☐ Neighbouring Property ☐
Dene/Burn ☐ Front of Property ☐
Unsure ☐ Rear of Property ☐
Other (Please tell us where) ..................

13. How quickly did the flooding happen?
In less than 30 minutes ☐ 30 minutes to 1 hour ☐
More than 1 hour ☐ Unsure ☐

14. After the flooding happened, how long did the water take to drain away?
Less than 30 minutes ☐ 30 Minutes to 1 hour ☐
More than 1 hour ☐ Water had to be pumped out ☐
Unsure ☐

15. Did you report the flooding in your property or street to anyone?
Newcastle City Council officers or councillors ☐ Envirocalls ☐
Northumbrian Water ☐ Enviroment Agency ☐
Other (please tell us who).................................................
16. Is there anything else you’d like to say about the recent flooding and the impact it may have had on you?


17. Do you need any help or advice about the recent flooding? If so, please tell us what kind of help or advice.


18. Finally, please provide us with your details. These will be kept completely confidential and we will not publish any findings which refer to your details or address. We may share the overall statistical information that we collect as part of this consultation with the agencies who we are working with — Northumbrian Water, the Environment Agency and Newcastle University. However, please rest assured that your personal details will NOT be shared in any way.

Title: Mr/Mrs/Ms
Name: ............................................................................................
Address: ............................................................................................
..............................................................
Postcode: ............................................................................................
Contact No: ..........................................................Email: ..............................................................

Thank you for all of the information you have provided. Please return this questionnaire in the reply paid envelope provided (no stamp is needed) by Monday 20th August 2012.

If you would like to speak to someone, please do not hesitate to contact Valerie Dowens on (0191) 2783169. Alternatively, please visit the website we have set up. This can be found at www.newcastle.gov.uk/floodmanagement. Please email your views and any flood photographs of Newcastle to: total.research@newcastle.gov.uk.
APPENDIX D – Briefing note provided to Total Research

Recent flooding in Newcastle – Questionnaire

Briefing note for telephone responses

Living document 24 July 2012

What happened - June 28th Flooding Event

- On Thursday 28th June, 50mm rain fell in around 2 hours. For Newcastle, this is equivalent to the expected rainfall for the whole month of June
- This event caused widespread localised flooding incidents across the city

How flooding occurred

- The highway drainage system is designed to cope with a certain amount of rainfall
- Public sewers and drains are also designed to cope with a certain amount of rainfall
- During very heavy rainfall such as the storm that Newcastle experienced on 28 June, the volume of water needing to drain away may exceed the capacity of the drains and sewers
- Heavy or prolonged rainfall can also cause the ground surface to become saturated with water
- If the drains and sewers are full, or if the ground is saturated, any subsequent rainfall will flow over the ground surface until it reaches a low lying area or enters a river (or the sea in coastal areas). This is called surface water flooding.

If your home was damaged by recent flooding

- We know that many properties were affected by recent flooding and appreciate this is a difficult time for many residents, particularly if they have had to move out of their homes while repairs take place.
- We are carrying out this survey to help us understand the full impact of recent flooding - this will help us plan to reduce the risk of flood damage in the future
- Encourage residents to fill in the questionnaire, even if they have already reported the flooding, either to the Council or to Northumbrian Water.
- Ask if residents can encourage their neighbours to fill in the questionnaire too, or if they know of anyone whose property was affected, but did not receive a questionnaire.
- This will help give as complete a picture as possible about the extent of the flooding that occurred and its effects.
- and help us prioritize areas for further investigation
Sewer Flooding

- If your property was affected by sewer flooding, residents should report this to Northumbrian Water on 0800 328 7648.
- Residents can also contact Northumbrian Water via their website or customer contact centre on 0845 717 1100 to request copies of the following leaflets that may be useful:
  - Sewer flooding – guidance and technical information
  - Our promise to you (NWL’s guaranteed standards of service)

Hardship Fund

- There is no hardship fund or other grant funding available from the Council to assist residents in recovering from the flooding.

Repairing your property

- If your home was damaged by recent flooding, you may want to talk to your insurer about repairing your property so that it is more resilient to any flooding in the future.
- Sometimes this can cost no more than standard repairs and can therefore be undertaken at no extra cost by your insurer, for example moving electrical points well above likely flood levels.
- Other measures may be more costly, for example using water resistant plaster or replacing timber floors with solid concrete. Your insurer will normally be willing to do this work as part of the repair as long as you are willing to pay the additional cost.
- Making your home more flood resilient can reduce the damage and disruption caused by any flooding in the future, leading to financial savings as well as the reduced stress and inconvenience from getting back into your home, and getting your life back to normal, more quickly.
- You may find the following publications useful:
  - A guide to resistant and resilient repair (Association of British Insurers)
  - Flood resilient homes (joint publication from the ABI and the National Flood Forum)
- Residents can also contact the National Flood Forum for further information and advice

Protecting your property from flooding in the future

- It’s impossible to completely flood-proof a building, but there are plenty of things you can do to help protect your property.
- This could both reduce the damage and disruption caused by any flooding in the future.
- Residents should contact a specialist flood surveyor to advise them about appropriate flood protection measures for their property.
- Before carrying out any work or installing flood protection measures, residents should talk to their insurer about any effects this will have on their premium or excess.
- In the long term, installing measures to protect your property from flooding could make it easier for an insurer to continue to provide cover.
• There are a number of leaflets and brochures published that provide more advice:
  o Environment Agency – Prepare Your Property For Flooding
  o Association of British Insurers (ABI) and the National Flood Forum – Flood resilient homes – what homeowners can do to reduce flood damage
  o Know Your Flood Risk Campaign – Homeowners guide to flood resilience – a living document
  o And others

• For more information, contact the National Flood Forum– who also publish the Blue Pages – an independent directory of flood protection products and services.

**Flood resistance**

• Flood resistance measures try and keep the water out of your property.
• Many people use sandbags to try and do this but there are lots of other products that are more effective at keeping floodwater out of your property.
• Examples include door barriers, airbrick covers and non-return valves to stop sewerage from backing up into your property.
• If the flooding is particularly deep or lasts a long time, you may not be able to entirely stop water from entering your property. However, flood resistance measures can give you more time to move your possessions upstairs or above the height of the floodwater.
• Flood doors and automatic airbrick covers are particularly useful as they are in place all the time and give residents extra peace of mind.
• Flood barriers that need to be installed when a flood occurs can still be useful, but residents need to consider what would happen if they were away from home, or if a flood event occurred in the middle of the night.

**Flood resilience**

• Flood resilience measures allow water to enter a property, but limit the damage caused.
• Examples of flood resilience measures include having solid concrete floors and tiling instead of wooden floorboards, raising electric sockets above the likely flood level or using plastic kitchen and bathroom units instead of chipboard.

**Is there any funding available for residents to protect their properties from flooding?**

• Unfortunately, there is no funding that residents can access directly to help protect their properties from flooding. In some circumstances, where there is a history of repeat flooding, the Council may be able to apply for funding to help residents protect their properties.
• Residents should be aware that eligibility for this funding is subject to certain criteria
• Any funding is unlikely to be forthcoming before 2015 at the earliest
• Funding may not cover the entire cost of installing flood protection measures.
Once we have the results of the survey, we will be able to see how many properties would be eligible to apply for funding and whether any funding would be available.

Worried about insurance / finding it hard to get insurance?

- If you are finding it hard to get insurance to cover flood damage, contact the National Flood Forum for help and advice.
- There is currently an agreement between the Government and the insurance industry, called the Statement of Principles.
- This obliges insurance companies to offer flood cover as part of standard policies in most cases. The agreement does not guarantee cover for some properties e.g. those that continue to have a significant flood risk and in all cases does not affect the price of insurance which remains a commercial decision for insurers.
- The existing agreement is due to expire in June 2013 and it has been agreed between Government and insurers that this will not be renewed.
- The Government is looking to develop with insurers a model that avoids increasing costs for those not at flood risk whilst helping households in flood risk areas to continue to afford insurance.
- DEFRA have recently published a guide to help property owners who are struggling to find flood insurance. This guide is called ‘Obtaining flood insurance in high risk areas’ and there is a link to it via the flood management webpage at www.newcastle.gov.uk/floodmanagement.

What the Council is doing, and what the Council can do to help:

- Newcastle City Council is a Lead Local Flood Authority under the Flood and Water Management Act 2010.
- This means the Council has a strategic role in managing the risk of flooding from ‘local sources’. These include surface runoff, flooding from ordinary watercourses i.e. denes and burns and flooding from groundwater.
- The Council is also working with the Environment Agency and Northumbrian Water to try and reduce the risk of future flood damage across the city.
- We are producing a local flood risk strategy to help us address the risk of flooding across the city – this is anticipated to be completed in 2013.
- In some circumstances where there is a history of repeat flooding, the Council may be able to apply for funding to help residents protect their properties (see above)

Sandbags

- The Council does not provide sandbags to individual properties— its priority is to protect the public at large.
- It is the responsibility of individual property owners to take action to protect their property from flooding
- If residents wish, they can purchase their own sandbags from DIY stores or Builders Merchants.
- Sandbags can keep out water for short periods and are relatively cheap and easy to obtain
But purpose made flood protection products can be much more effective (see ‘Protecting your property from flooding’)

**Highway drainage / blocked drains and gullies**

- As the Highway Authority for the city, the Council is responsible for dealing with highway drainage.
- If a drain or gully is blocked, residents should report this and ask for it to be cleaned by calling Envirocall on 0191 274 4000.
- In areas where there are frequent problems, the Council can arrange for the gullies to be inspected more frequently. We may also carry out further investigations or work if highway maintenance budgets allow.
- The Council is not responsible for the maintenance of highway drainage on unadopted roads.
- Blocked drains within a property boundary are the responsibility of the property owner (tenants may need to contact their landlord)

**What the council cannot do**

- The Council is unable to take responsibility for protecting individual properties from flooding – this is the responsibility of the property owner. However, we can provide residents with advice about where to go to find further information and advice.

**Important points –**

**Emphasize importance of reporting flood incidents to the relevant organisation.**

- For surface water flooding or problems with highway drainage, contact NCC Envirocall on 0191 278 7878
- For flooding from the Ouseburn or the Tyne, contact the Environment Agency Floodline on 0845 988 1188
- For flooding from sewers or manholes, contact Northumbrian Water Floodline on 0800 328 7648

Reporting incidents helps us build up a full picture of flooding across the city. This provides an evidence base and allows us to prioritize any future works.

**Ask if residents have any photos of flooding on June 28 that they can send in (include date, time (if known) and location)**
APPENDIX E – Useful contact information

Newcastle City Council

- To report any issues with blocked gullies or highway drainage:
  Phone: 0191 278 7878 and ask for Envirocall
  Web: www.newcastle.gov.uk/envirocall
  E-mail: envirocall@newcastle.gov.uk

- For general information and advice about flooding issues in Newcastle or to report flooding from surface runoff, denes or burns:
  Phone: 0191 278 7878 and ask for Envirocall, or alternatively, the Flood Management team.
  Web: www.newcastle.gov.uk/floodmanagement
  E-mail: flood.management@newcastle.gov.uk

Environment Agency

- For flood warnings, information or advice or to report flooding from the Tyne or the Ouseburn.
  Phone: Floodline 0845 988 1188
  Web: www.environment-agency.gov.uk/homeandleisure/floods
  E-mail: enquiries@environment-agency.gov.uk

Northumbrian Water

- For information about sewer flooding or to report a sewer flooding incident:
  Phone: 0845 717 1100 (for general enquiries)
          0800 328 7648 (to report a sewer flooding incident)
  Web: www.nwl.co.uk

National Flood Forum

- Charity offering support and advice to people and communities affected by flooding.
  Phone: 01299 403 055
  Web: www.floodforum.org.uk

Blue Pages – independent directory of flood protection products and services
Web: www.bluepages.org.uk