

***Report of the Safer and Stronger  
Communities Scrutiny  
Panel***

***Local action taken to manage  
flood risk in North Lincolnshire***

December 2009

The Safer and Stronger Communities Scrutiny Panel role is to carry out the relevant overview and scrutiny functions relating to services being delivered by the council and its partners for cleaner, greener, stronger and safer communities, and associated transport and environmental matters. It also monitors the work of the Cabinet and individual Cabinet Members within these terms of reference.

This report is the end result of a review into a particular subject. It sums up how the review was carried out, the panel's findings, considerations, conclusions and recommendations for any improvements that could be made.

## OVERVIEW AND SCRUTINY REPORT

### **‘Local Action Taken to Manage Flood Risk in North Lincolnshire’**

What is in this Report	PAGE NO.
➤ Introduction by the Chair of the Safer and Stronger Communities Scrutiny Panel	3
➤ Membership of the Safer and Stronger Communities Scrutiny Panel	5
➤ Glossary	6
➤ The Selection and Scope of the Review	9
➤ How the Review was Carried Out	11
➤ The Panel’s Findings/Considerations	13
➤ The Panel’s Conclusions and Recommendations	31



## **INTRODUCTION BY THE CHAIR OF THE SAFER AND STRONGER COMMUNITIES SCRUTINY PANEL**

Welcome to the Safer and Stronger Communities Scrutiny Panel report into 'Local Action Taken to Manage Flood Risk in North Lincolnshire'.

Our reasons for choosing this particular topic came about following the dramatic floods of 2007. Many councils' had scrutinised their own initial reactions to the floods, but none as far as we are aware had given thought to how any action plans were working and whether the support mechanisms put into place were the right ones.

During our review, we carried out many interviews and focus groups with interested parties, the council and their partners. Notably, members of the public who came along to talk to us had all been affected by the floods. Clearly some were still distressed about damage to their homes and this was, to them a very emotive subject. Although there was concern about how the council had reacted initially, especially in relation to a central contact point, there was widespread support and recognition for the work that had been done since then.

I certainly hope that our work will help in the onward planning process and some of our recommendations will help to ensure that the work already done will continue, something that members of the public were concerned would cease once the immediate threat disappeared.

I think it is crucial that all elected members receive training in relation to planning applications and any flooding implications that may arise. It is clear that not all members take such implications seriously and I would hope that this training is organised as soon as is practicable.

It is also of great importance that all landowners and residents who may have responsibility for waterways on their land are reminded of their responsibilities in maintaining such waterways; panel heard of many instances where small parts of ditches and dykes had been filled in which had dire consequences for other properties.

The Parish Councils who attended our meeting expressed a willingness to help us with identifying such properties with responsibilities and I personally thank them for that and all the work they have done in relation to reducing the flood risk for their parishioners.

There are many recommendations relating directly to our own council in this report, notably that we maintain at least the annual gully clearing schedule we have currently. It may also be useful to consider flooding bulletins by text, website and even facebook or other networking sites to those in affected areas. This is certainly worth exploring.

I would like to give special thanks to members of the Panel who supported extra meetings to welcome members of the public and our parish and town council colleagues.

I hope that Council will welcome our report, and that Cabinet will give serious consideration to our recommendations within it.

**Councillor Andrea Davison**

Chair, Safer and Stronger Communities Scrutiny Panel

**MEMBERSHIP OF THE SAFER AND STRONGER COMMUNITIES  
SCRUTINY PANEL**

Councillors:           A Davison (chair)  
                              R Waltham (vice-chair)  
                              M Ali  
                              S Armitage  
                              P Clark  
                              T Ellerby \*  
                              T Foster

Co-opted Member   Mr G Popple – Service Director Highways and Planning

\* NB Councillor Ellerby, having declared a personal and prejudicial interest in the subject matter, took no part in the review.

## GLOSSARY

This report is written as far as possible in plain English with the minimum of jargon. All acronyms are spelt out in full when they first appear but for the sake of clarity their meanings are repeated here.

- Chance of flooding - The chance of flooding is used to describe the frequency of a flood event occurring in any given year, e.g. there is a 1 in 100 chance of flooding in this location in any given year.
- Critical infrastructure - Infrastructure which is considered vital or indispensable to society, the economy, public health or the environment, and where the failure or destruction would have large impact. This would include emergency services such as hospitals, communications, electricity substations, water treatment works, and reservoirs.
- Community Emergency Plan - A Community Emergency Plan provides a self help response during any emergency affecting the community, when the normal emergency response provided by the Emergency Services and the Local Authorities is delayed, because of the scope and nature of the emergency.
- Civil Contingencies Act - The Civil Contingencies Act, and accompanying non-legislative measures, delivers a single framework for civil protection in the United Kingdom capable of meeting the challenges of the twenty-first century.
- Department for Environment, Food and Rural Affairs (Defra) - A government department that brings together the interests of farmers and the countryside; the environment and the rural economy; the food we eat, the air we breathe and the water we drink.
- Environment Agency - The Environment Agency is the leading public body for protecting and improving the environment in England and Wales today and for future generations. The organisation is responsible for wide-ranging matters, including the management of all forms of flood risk, water resources, water quality, waste regulation, pollution control, inland fisheries, recreation, conservation and navigation of inland waterways. It will also have a new strategic overview for all forms of inland flooding

- Flood and Water Management Bill
  - The Bill aims to provide better, more sustainable management of flood risk for people, homes and businesses, help safeguard community groups from unaffordable rises in surface water drainage charges and protect water supplies to the consumer.
  
- Flood Forum
  - The North Lincolnshire Flood Forum is a multi agency group consisting of the Environment Agency, Severn Trent, Anglian Water, Internal Drainage Boards, Fire Brigade, Government Office for Yorkshire and Humber, Humber Emergency Planning Service and the council.
  
- Fluvial Flooding
  - Fluvial flooding (from rivers) is most commonly caused by intense bursts of rain causing flash floods or prolonged rainfall on saturated ground in the river catchment, which results in rivers or other watercourses overflowing their banks.
  
- Internal Drainage Boards
  - Local drainage authorities established in some areas of the country, historically in low-lying areas with particular land drainage problems.
  
- Local Resilience Forum
  - The Local Resilience Forum is a multi-agency forum, bringing together all organisations who have a duty to co-operate under the Civil Contingencies Act, and those involved in responding to emergencies. They prepare emergency plans in a co-ordinated manner.
  
- Pitt Review
  - An independent review of the 2007 summer floods by Sir Michael Pitt, which provided recommendations to improve flood risk management in England
  
- Planning Policy Statements
  - Set out the Government's national policies on different aspect of planning. The policies in these statements apply throughout England and focus on procedural policy and the process of preparing local development documents. PPS25 deals with Development and Flood Risk and describes the purpose of site-specific Flood Risk Assessments and Strategic Flood Risk Assessments



- Pluvial flooding - 'Pluvial' flooding (or surface runoff flooding) is caused by rainfall and is that flooding which occurs due to water ponding on or flowing over the surface before it reaches a drain or watercourse.
- Riparian owners - A riparian owner is someone who owns land or property adjacent to a watercourse. A riparian owner has a duty to maintain the watercourse and allow flow to pass through freely.
- Risk - In flood risk management risk is defined as the probability of a flood occurring x consequence of the flood
- Sequential Test - A planning principle that seeks to identify, allocate or develop certain types or locations of land before others.
- Surface Water Flooding - In this context, surface water flooding describes flooding from sewers, drains, small watercourses and ditches that occurs as a result of heavy rainfall.
- Strategic Flood Risk Assessment - A Strategic Flood Risk Assessment provides information on areas at risk from all sources of flooding. The SFRA should form the basis for flood risk management decisions, and provides the basis from which to apply the Sequential Test and Exception Test (as defined in PPS25) in development allocation and development control process
- Sustainable Urban Drainage Systems - Sustainable Urban Drainage Systems are designed to mimic natural drainage processes by allowing rainfall to infiltrate and by attenuating and conveying surface water runoff slowly compared to conventional drainage. SUDS can operate at different levels; ideally in a hierarchy of source control, local control and regional control.
- Surface Water Management Plan - Surface Water Management Plans can deliver flood risk and water quality benefits for new and existing development and are an essential tool to help coordinate investments across different public and private-sector bodies.

## **1 THE SELECTION AND SCOPE OF THE REVIEW**

The Safer and Stronger Communities Scrutiny Panel's role is to monitor or examine services being delivered by the council and its partners for cleaner, greener, stronger and safer communities, and associated transport and environmental matters.

The panel agreed to conduct this review after undertaking its usual consultation process with Service Directors, Cabinet Members and other stakeholders for any policy or service areas that would benefit from independent overview and scrutiny members reviewing the service.

As a result, the Service Director Highways and Planning suggested that the scrutiny panel undertake a review into the 'Local Action Taken to Manage Flood Risk in North Lincolnshire'.

The Service Director informed the scrutiny panel that since the summer floods in 2007, the council had put in place a number of arrangements to mitigate the impact of any future flooding incidents. Between June 2007 and January 2008, over 700 properties in North Lincolnshire were affected by flooding.

Although the rainfall was of an extreme nature, it had been a 'wake up call' for the council and its partners to work together in putting arrangements in place to mitigate the impact of any future events.

However, no consideration had been given to reviewing those arrangements and ask whether they are robust enough and have the support and commitment of all other flooding agencies and stakeholders.

In addition, Sir Michael Pitt had now published his final report into the floods of 2007 and early 2008.

That review identified 92 recommendations to be implemented to enable the country to co-ordinate further periods of heavy rainfall. The Government had indicated that it would implement all 92 recommendations.

Of those 92 recommendations, two were specific to councils' overview and scrutiny functions.

Recommendation 90 states:

"All upper tier local authorities should establish Oversight and Scrutiny Committees to review work by public sector bodies and essential service providers in order to manage flood risk, underpinned by a legal requirement to co-operate and share information."

Recommendation 91 states:

“Each Oversight and Scrutiny Committee should prepare an annual summary of actions taken locally to manage flood risk and implement this Review, and these reports should be public and reviewed by Government Offices and the Environment Agency.”

Consequently, the scrutiny panel agreed unanimously to conduct a review into ‘Local Action Taken to Manage Flood Risk in North Lincolnshire’ with a brief -

- (i) To consider the arrangements the council has put in place to mitigate the impact of any future flooding incidents.
- (ii) To consider if those arrangements are robust enough and have the support and commitment of all other agencies and stakeholders.
- (iii) To investigate the success and workings of the Flood Forum and consider its effectiveness, as seen from other partners.
- (iv) To explore the effectiveness of emergency plans with individuals and community groups.
- (v) To consider the implications to overview and scrutiny of the recommendations arising from Sir Michael Pitts review into the floods of 2007.

## **2 HOW THE REVIEW WAS CARRIED OUT**

The council's Safer and Stronger Communities Scrutiny Panel –

Agreed to carry out an intensive investigation into the 'Local Action Taken to Manage Flood Risk in North Lincolnshire'.

### **Desktop Research**

Documentation including -

- Local and National press articles
- Wide range of websites and national journals were also used as part of the information collection process.

### **Interviews**

Interviews were held with internal and external witnesses including -

- Sandra Barker - Head of Customer Service - North Lincolnshire Council
- Rob Beales - Head of Better Roads - North Lincolnshire Council
- Chris Barwell - Spatial Planning Manager – North Lincolnshire Council
- Margaret Burrup - Sewer Flooding Manager - Severn Trent
- Rod Chapman - Asset Team Manager - North Lincolnshire Council
- Simon Driver – Chief Executive – North Lincolnshire Council
- Keith Ford - Service Director Neighbourhood and Environment - North Lincolnshire Council
- Councillor L Foster – Deputy Leader and Cabinet Member for Neighbourhood, Environmental and Communities – North Lincolnshire Council
- Craig Fotheringham - Senior Planning Officer – North Lincolnshire Council
- Bill Hill - Principal Officer – Development Control - North Lincolnshire Council
- David Hoskins - Asset Management - Environment Agency (Midlands)
- Phil Hotchin, Head of Streetscene and Landscapes, North Lincolnshire Council
- Peter Joyce - Anglian Water

- Trevor Laming - Head of Communities and Environment - North Lincolnshire Council
- Neil Laminman - Service Director Community Planning and Resources - North Lincolnshire Council
- Jim Marshall - Flood Incident Management Team Leader - Environment Agency (Anglian)
- Tony Parrott - Community Risk Manager - Humberside Fire and Rescue Service
- David Sissons - Isle of Axholme Drainage Board
- Ian Smith – Project Officer - Severn Trent
- Innes Thomson - Area Flood Risk Manager for Midlands East Area - Environment Agency (Midlands)
- Trevor Vessey - Chief Executive - North East Lindsey Drainage Board
- John Whiteman - Emergency Planning Manager - Humber Emergency Planning Service

### **Focus Group**

The scrutiny panel wrote to over 700 homeowners who had informed the council that they had been affected by the floods of 2007 and 2008, inviting them to attend workshops with the members to discuss the 'local action taken to manage flood risk in North Lincolnshire' since the floods of 2007 and 2008. Three workshops were held with those members of the public who responded to the scrutiny panel's invitation.

### **Town and Parish Council**

The scrutiny panel invited a selection of town and parish council's who had completed a community emergency plan, were in the process of completing a community emergency plan and those parish councils which had agreed not to implement a community emergency plan to a workshop meeting to share their views with the members.

### **Panel Meetings**

A series of public meetings were held for witness interviews and presentations, together with planning and evaluation meetings to consider information collated and presented to members.

Sub-groups made up of panel members also met to deal with urgent business in order for the review to proceed efficiently and effectively.

### **3 THE PANEL'S FINDINGS/CONSIDERATIONS**

The programme of work carried out by the panel enabled members to use different techniques and perspectives to comprehensively examine the issue of the 'Local Action Taken to Manage Flood Risk in North Lincolnshire'. The findings and considerations of the panel are outlined below.

#### **Sir Michael Pitt**

Following the floods of 2007 and early 2008, Environment Secretary Hilary Benn announced that Sir Michael Pitt, chair of the South West Strategic Health Authority, would lead a review into the floods.

The Lessons Learned Review, carried out by the Cabinet Office with support from the Department for Environment Food and Rural Affairs and the Department for Communities and Local Government, examined both how to reduce the risk and impact of floods, and the emergency response to the floods in June and July 2007. It sought views from those involved in the floods, including affected residents, the emergency services, business and professional associations.

Sir Michael published his interim report on 17 December 2007.

The Final Report examined over 1000 written submissions, consulted widely, considered the experiences of other countries and visited the communities affected by flooding.

The floods of 2007 caused the country's largest peacetime emergency since World War II. The impact of climate change meant that the probability of events on a similar scale happening in future was increasing. The Review therefore called for urgent and fundamental changes in the way the country was adapting to the likelihood of more frequent and intense periods of heavy rainfall.

The review identified 92 recommendations to be implemented to enable the country to co-ordinate further periods of heavy rainfall. The Government had indicated that it would implement all 92 recommendations.

Of those 92 recommendations, two were specific to councils' overview and scrutiny functions. The logic being that due to the wide range of organisations which had a part to play in reducing the impact of future flooding in local areas meant that the scrutiny model was particularly well-suited to holding all the partners to account. The two recommendations were specific to flood risk management and critical infrastructure.

This scrutiny investigation was therefore as a result of Pitt's final report. The Pitt Report recommendation 90 states:

“All upper tier local authorities should establish Oversight and Scrutiny Committees to review work by public sector bodies and essential service providers in order to manage flood risk, underpinned by a legal requirement to co-operate and share information.”

Recommendation 91 states:

“Each Oversight and Scrutiny Committee should prepare an annual summary of actions taken locally to manage flood risk and implement this Review, and these reports should be public and reviewed by Government Offices and the Environment Agency.”

Members of the scrutiny panel therefore agreed to act upon Recommendation 90.

### **Government response**

On 3 July, the Environment Secretary announced that the Government would increase the spending on risk management and flood defences by £200 million to £800 million by 2010-11. During Prime Minister's Questions in the House of Commons later that month, Prime Minister Gordon Brown promised £46 million in aid to flood-hit councils and an £800 million rise in annual spending on flood protection by 2010-11, confirming the Environment Secretary's announcement. The Prime Minister also pledged to push insurance firms to make payouts.

On 22 July, the Government convened COBRA to co-ordinate the response to the crisis. The group is named after the 'Cabinet Office Briefing Room A' in the bowels of Downing Street where it normally meets.

### **North Lincolnshire**

Over 700 properties in North Lincolnshire were affected by the flooding that occurred in June 2007 and January 2008. The 90 mm to 100 mm of rainfall experienced on 25 June 2007 that fell in a period of 10 hours equated to a 1 in 100 year rainfall event. The rainfall added to the wet antecedent conditions with an already above average rainfall with 145 mm falling in the 11 days before the 25<sup>th</sup>.

Of these, 458 householders reported water damage to their homes. At the time of the floods, North Lincolnshire had 124 householders who had to move out of their property. Twelve months later, 42 of these householders were still not back in their homes and a further 36 householders occupied only part of their property. A further 34 properties were affected by flooding in January and August 2008.

The Environment Agency reported that across Yorkshire and Humberside, 18,472 properties were flooded from surface water in 2007.

## **So what caused the flooding in North Lincolnshire?**

In North Lincolnshire, the area is most at risk from fluvial (from rivers) and pluvial (surface water) flooding.

Fluvial flooding (from rivers) is most commonly caused by intense bursts of rain causing flash floods or prolonged rainfall on saturated ground in the river catchment, which results in rivers or other watercourses overflowing their banks.

This may lead to a minor inundation of properties and road closures, or result in widespread loss of life and devastation of property necessitating the implementation of a co-ordinated recovery plan.

The Environment Agency "Flooding in England" document, indicates 5,000 to 7,000 properties at risk of fluvial (river based) flooding in North Lincolnshire. Work is being undertaken by the Environment Agency to include surface water flooding risk within this assessment. The Environment Agency web site has specific maps showing the risk from river flooding. These are compiled using computer modelling based on information from the Met Office.

Pluvial Flooding is the name given to flooding resulting directly from rainfall. It happens when the ground, rivers and drains cannot absorb heavy rainfall. Typically this type of flooding is very localised and happens very quickly after the rain has fallen, making it difficult to give any warning.

Flooding from surface water is much more complex to try to predict than flooding from rivers. It often happens in urban areas where there is little open ground to absorb rainfall, and where manmade drainage systems may be overwhelmed.

Predicting surface water flooding has been described as an art rather than a science. At this time the Environment Agency does not have a comprehensive mapping system for surface water flooding. Although this process has been initiated, there are significant challenges in identifying surface water risk areas.

According to the government response to the Pitt review, this is due to be completed in 2010. The scrutiny panel eagerly awaits this significant development in flood prediction.

## **Local Resilience Forum (LRF)**

Historically, responsibility for responding to and recovering from emergencies (civil resilience), passed to local authorities after the Second World War. The perceived emergencies had initially focussed on the threat from 12 Eastern Bloc countries. Over time, the focus changed and it was accepted that there was a need for a review of emergency planning procedures and wide consultation followed.



This resulted in the Civil Contingencies Act (CCA) 2004, which now requires organisations to work together effectively in a more formalised framework.

The Humber region already had well established emergency plans and procedures which were easily adapted to the requirements of the CCA when this came into force in November 2005. The Humber Local Resilience Forum (LRF) is a multi-agency group comprising bodies within the Humber area carrying out this role. The LRF is a process and has no separate legal personality of its own. It provides Category One Responders with the means to cooperate in the effective delivery of these duties under the Act that need to be developed in a multi-agency environment. Simon Driver, Chief Executive of North Lincolnshire Council, currently chairs the LRF.

Organisations are divided into Category 1 or Category 2 responders. Category 1 includes county and district councils, national and local health agencies, the blue light emergency services and the Environment Agency. Category 2 includes the utilities and the Highways Agency. Category 1 responders also have the right to make their own decisions for example, whether to evacuate a local authority home.

The CCA established seven Statutory duties (for category 1 responders) relating to emergency preparedness and response, including:

- Carrying out risk assessments;
- Drawing up and maintaining plans based on the risk assessments;
- Maintaining arrangements for warning and informing the public if an emergency is likely to occur or had occurred and for providing them with advice;
- Co-operation between Category 1 and 2 responders;
- Information sharing;
- Business Continuity – to have plans in place; and
- To promote Business Continuity Management to the business and local communities.

The LRF seeks to ensure partner agencies co-ordinate resources so they can respond effectively when incidents occur. The LRF also exists to warn, inform, advise and educate the public about developments in the area of Civil Resilience.

The LRF meets every three months and rotates round member organisations. However, during an emergency, the police lead the response.

The hierarchy of the command structure is known as Gold, Silver and Bronze. In broad terms, Gold Command make strategic decisions (e.g. to evacuate a large area) and communicate up to COBRA (national Government). Silver Command (or Silver Control) make tactical decisions (e.g. how an evacuation would be carried out). Bronze Command make operational decisions (e.g. carry out an evacuation).

## **Declaring an emergency**

The scrutiny panel considered the procedures relating to who declares an emergency and how it is decided. Members learned that any Category 1 responder could declare an emergency. The criteria for doing so is when that responder reaches a situation where it is seriously obstructed in performing its duties and when the environment, safety and welfare of the public is likely to be put at risk. However, declaring an emergency is not an exact science. In a 'rising tide incident', commanders and senior managers will communicate when the prospect of an emergency looms and will move toward the declaration of an emergency if appropriate.

On 25 June 2007, North Lincolnshire Council had realised that flooding was becoming serious and all staff in affected areas were sent home early. The situation deteriorated throughout the afternoon. School children were unable to get home, major roads had become impassable and rest centres were beginning to be set up from 5-6pm.

A major emergency was 'declared' by Humberside Police in Hull at a meeting that took place between 'Gold' representatives of the fire service, police and city council on the morning of 25 June 2007. Consequently, silver command operations were put in place in North Lincolnshire, although North Lincolnshire Council did not declare an emergency.

However, Pitt's recommendations number 43 is that 'Gold Commands should be established at an early stage on a precautionary basis where there is a risk of serious flooding'.

## **Who is responsible?**

Organisational responsibility and improving surface water drainage are two broad, but inter-linked, issues which need to be addressed, according to the Environment, Food and Rural Affairs (EFRA) Select Committee inquiry published in May 2008.

The Environment Agency collects data on river and coastal flooding and is responsible for issuing flood warnings in these areas. It is clear that 'No organisation either nationally or locally currently has overall responsibility for surface water flooding'.

## **North Lincolnshire Flood Forum**

Following the summer floods of 2007, the panel learned that the council established the North Lincolnshire Flood Forum. The Forum was a multi agency group consisting of the Environment Agency, Severn Trent, Anglian Water, Internal Drainage Boards, Fire Brigade, Government Office for Yorkshire and Humber, Humber Emergency Planning Service and the council. The flood forum had its first meeting on Thursday 26 July 2007.

The immediate aim of the Forum was to –

- Discuss issues around response to recent flooding
- Identify problem areas, agency responsibility and work to be undertaken
- Deal with communities around North Lincolnshire regarding updates
- Compile a Formal Forum to consider the longer term issues around flooding and the establishment of a Multi Agency Flooding Plan

The main issues that the Flood Forum is concentrating on are:

- Gully cleaning.
- Maintenance of ditches and dykes.
- Maintenance of pumping stations.
- Planning issues.

As part of the review, members of the panel interviewed all the stakeholders involved in the Flood Forum. This enabled the panel to understand the role, remit and success of the Flood Forum.

### **Has the Flood Forum been successful?**

All members of the Flood Forum were emphatic in their views that the Flood Forum is extremely successful. Regular attendance from all the partners has allowed many outcomes to be achieved in a relatively short period of time. For example, thorough investigations are paramount in developing robust solutions. Amongst other things, the Flood Forum has undertaken joint investigations with the Internal Drainage Board into flooding problems at Low Burnham, and a study with the Environment Agency is underway at Barrow to identify a potential solution to the springs above Westoby Lane that become active when the water table is high. Other studies are planned and essential.

Many partners confirmed that the North Lincolnshire Flood Forum is seen as an example of good practice. The Service Director Highways and Planning had done an outstanding job in developing a multi agency partnership to tackle flooding problems. It was even reported by three partners that Sir Michael Pitt had used the North Lincolnshire Flood Forum model as a template for how all authorities should establish partnership arrangements.

The Forum has also been useful in terms of ancillary issues such as responding to government legislation.

### **What are the key outcomes of the Forum?**

The Forum is about partnerships; the sharing of knowledge and data; the sharing of problems and finding solutions. It is also about the wider involvement of everyone who can and needs to get involved to deal with flooding matters. The Pitt Review and the Flood and Water Management Bill emphasise the need to work together to solve problems.

Members were informed during consultations that during the summer floods of 2007 there had been a lack of contacts, understanding of who did what and also who was responsible for what. Since then, communications had improved and there was now a network of agencies, some new, who could help and assist the Forum.

The panel was advised that there was still a significant amount of work to do. A huge amount had been achieved, however this had been constrained due to budgets. The council's Highways service had taken ownership of surface drainage, but additional funds were needed to ensure the resources were available when needed.

Pitt's recommendation number 35 states 'that the Environment Agency should make relevant flood visualisation data, held in electronic map format available online to Gold and Silver Commands'.

Members were impressed to hear that the Flood Forum had worked together to map important ditches and surface water flood risk areas and were exploring how to develop countywide flood risk Geographical Information System maps to enable better modelling.

## **Communication**

### **(i) Flood Forum Partners**

Partners were of the opinion that communication is getting better, but there is still work to be done. One of the successes of the Forum is about building relationships. Agencies now talk together, which did not happen before. The Forum has now developed into a 'flood family'. For example, there are a number of routes for funding opportunities which are coming up on surface water management plans. Communication with partners is essential for this process in submitting joint bids. The Environment Agency is working closely with the council on these bids.

Partners now have designated names, numbers and addresses for all agencies responsible for a multitude of water management activities. Were the summer floods of 2007 to be repeated then lack of communication would not be an issue.

Funding for Surface Water Management Plans is allocated on a priority basis, based on population and as North Lincolnshire is a rural area it is in serious competition with urban authorities. North Lincolnshire Council stands more of a chance of success if bidding with partners.

### **(ii) Town and Parish Councils**

Following the scrutiny panels meeting with town and parish councils affected by the floods in 2007, the members were reassured to hear that all town and parish councils that attended the workshop were very complimentary about

the communication and relationships that existed between North Lincolnshire Council and the town and parish councils in relation to flood prevention.

Flooding has been a standing item on the council's quarterly town and parish council liaison meeting. Officers from the council's Highways and Planning service had attended 43 town and parish council meetings to discuss flood prevention with councillors. Officers from the council's Highways and Planning service have been praised for their co-operation and for developing an efficient working relationship with the town or parish council.

Members were greatly impressed with the monthly publication titled 'Brigg Matters'. This is a dedicated free monthly publication which is delivered to every household and business in Brigg. Members were very kindly sent seven different editions of the publication which contained various flood related articles. For example, Issue 8 of the publication had an article on the floods of June 2007, article 9 had an article on drainage gullies etc.

The scrutiny panel is aware that parishes simply had to cope as best they could during the summer flooding emergency. Parishes generally did not have emergency plans or contact numbers and little or no involvement with the Local Resilience Forum. They did however believe that there were many ways in which they could assist (and were willing to do so).

Pitt recommendation number 61 states 'that the Environment Agency should work with local responders to raise awareness in flood risk areas and identify a range of mechanisms to warn the public, particularly the vulnerable, in response to flooding'.

Some parishes reported that they had been asked by North Lincolnshire Council to act as 'flood buddies'. This was an initiative that would see the council communicate with the 'buddy', who would then convey the message as required throughout their parish. However, implementation of this scheme appeared to be very ad hoc, which was unfortunate as the scrutiny panel was heartened to hear that parishes were willing to take on a more proactive role in response to an emergency providing they have the necessary tools and support.

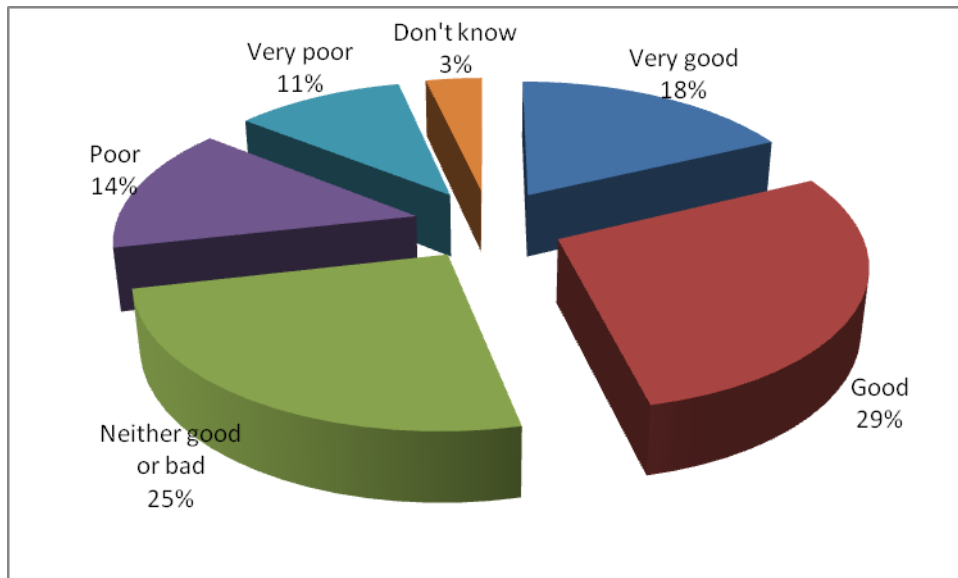
(iii) Members of the public

Members of the public, however, were extremely critical of the council and its partners for the work undertaken since the floods of 2007 and 2008, despite significant investment across the area. There was very little confidence that their properties would not be flooded again.

Flood victims were extremely critical of the communication during and following the summer floods of 2007. Homeowners were extremely frustrated that they could not make contact with the council. This was because Pittwood House itself had been flooded, resulting in the entire telecommunications network for the council being disrupted.

Due to the council not being contactable, residents had no information or contact details explaining how they could seek help and assistance.

Members of the public who attended the scrutiny panels' workshop were asked 'how would you rate the council and its partners in their efforts to mitigate the impact of any future flooding'? The following chart illustrates their response to the question.



Many homeowners were complimentary of the work that the Flood Forum had undertaken following the floods, both in the immediate aftermath of the floods and the subsequent implementation of flood prevention schemes. However, some homeowners were critical of the work, or perceived lack of progress being made since 2007.

Despite attempts to explain the many projects and the vast amounts of money being spent by the Flood Forum partners, there was a general cynicism towards the outcome of these projects.

(iv) During an emergency

Communication has been consistently identified as a key issue, both from national and local publications and in every witness session. It cuts across the stages identified by Pitt; risk management; flood prevention; warning and informing; rescue and emergency care and recovery.

Members learned that there is no joined up communications strategy applicable across the Flood Forum partners. The summer floods were a huge local story which became a huge national story and key press officers were besieged by regional and national media each bringing differing demands for information.

A single point of contact for all media enquiries would result in one clear and concise message being delivered to all news agencies, and more importantly to the homeowners who are likely to be affected by the flooding.

Had this been in place during the summer floods of 2007, homeowners would still have been informed of weather updates, recovery programmes etc via the internet or local radio despite Pittwood House being evacuated and all the telecommunications being disrupted.

Pitt's recommendation number 67 states that 'the Cabinet Office should provide advice to ensure that all Local Resilience Forums have effective and linked websites providing public information before, during and after an emergency'.

### **Future of the Flood Forum**

Flood Forum partners expressed their concern that the governance of the North Lincolnshire Flood Forum had been situated in the Yorkshire and Humber area, yet the catchment was south of the Humber. This resulted in North Lincolnshire losing its identity and voice on key strategic issues.

Members were made aware that the Fire Service is represented on the Forum and the Police have attended in the past. As the Forum tends to concentrate on the engineering side, a proposal was put forward that a separate group be convened to deal with emergency planning issues only.

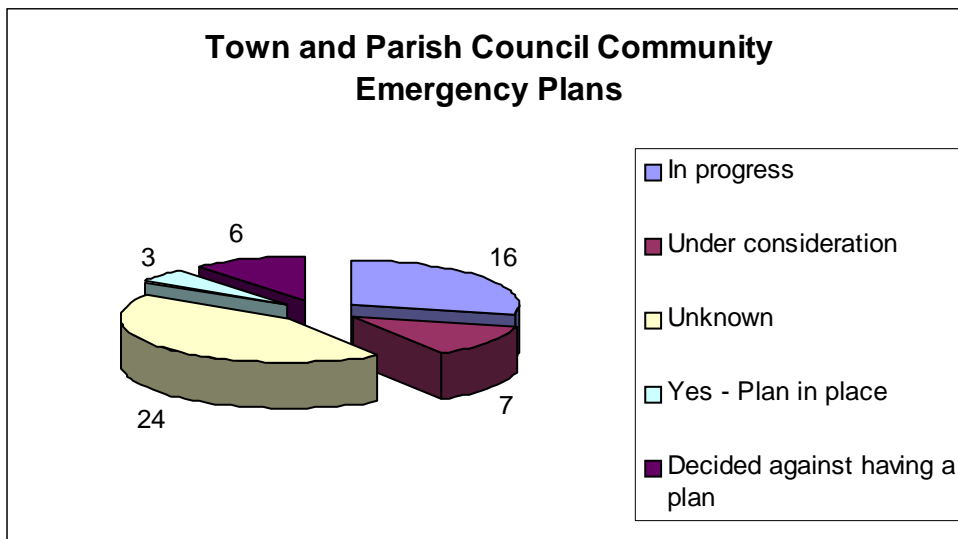
An additional proposal was also put forward inviting North East Lincolnshire Flood Forum to merge with its North Lincolnshire counterpart. This would provide economies of scale for partner agencies, both in terms of resources and productivity.

### **Community Emergency Plans**

The scrutiny panel was informed that the council's Emergency Planning team were in the process of compiling flood plans for each town and parish in North Lincolnshire.

The summer floods of 2007 had a real impact on the well-being of many communities. The emergency services, council and other professionals found themselves overloaded and not able to support every community. Even after some time the support from other agencies may be limited. It would have helped them and those living or working in the community, particularly the vulnerable, if every town or parish could promote or activate some self-help. Indeed the value of planning at the community level cannot be underestimated.

Therefore, every town and parish council was asked to complete a Community Emergency Plan. The table overleaf identifies the progress being made by town or parish councils in completing their community emergency plan.



As the table clearly demonstrates, only three town or parish councils had put in place a community emergency plan, whilst worryingly seven councils had decided against having a plan. The status of a further twenty four community emergency plans was unknown.

Of the ten town and parish councils spoken to by the scrutiny panel, only two councils had either started or completed their plan. Of the remaining eight councils, a whole host of reasons were provided why a plan had not been completed, namely –

- The lack of expertise on the council to complete the document
- Issues regarding data protection
- Plan not needed as area was not affected by the floods of 2007

Clearly there is a need for North Lincolnshire Council to work with town and parish councils to build confidence in the plans and to make them as robust as possible.

### **Local Flood Risk Management**

The draft Flood and Water Bill states that county, unitary and district local authorities, the Environment Agency, water companies and sewerage undertakers and other partners including Internal Drainage Boards, should work together to secure effective and consistent management of local flood risk in their areas. These organisations should work together to decide the best arrangements for delivery on an area by area basis, taking account of their current roles and capacities, underpinned by a new duty on all partners to co-operate and share information

Sir Michael Pitt also recommended that local authorities should collect information from private landowners or individuals on the flood and drainage assets for which they are responsible. That function could be underpinned by a similar duty to that described in the paragraph above.



The draft Bill places the leadership role in these partnerships on county and unitary local authorities. They will need to ensure that all relevant partners are engaged in developing a strategy for local flood risk management and securing progress in its implementation. This will build on the county and unitary authority leadership role in Local Area Agreements, and will allow them to develop centres of engineering and flood risk expertise alongside their existing highways functions, providing support to other partners and promoting collaboration across the whole area.

To fulfill this role the council would need to ensure they have a strategy for local flood risk management. This will comprise a range of documents and working practices which, among other things, sets out how they will:

- convene and co-ordinate district local authorities, Internal Drainage Boards, water and sewerage companies, highways bodies and any others that they consider necessary to deliver a joined up management of local flood risk in their areas;
- produce flood risk assessments and flood risk action plans (e.g. Surface Water Management Plans) for their areas. These should be consistent with the Environment Agency's Flood and Coastal Erosion Risk Management programme (FCERM) strategy and any supplementary guidance use any existing relevant work and such as Strategic Flood Risk Assessments. In part this will deliver the EU floods Directive.

### **Surface Water Management Plans**

Through the panels' stakeholder interviews, members were made aware of Surface Water Management Plans.

A Surface Water Management Plan is a framework through which key local partners with responsibility for surface water and drainage in their area work together to understand the causes of surface water flooding and agree the most cost effective way of managing surface water flood risk.

Surface Water Management Plans (SWMPs) can deliver flood risk and water quality benefits for new and existing development and are an essential tool to help coordinate investments across different public and private-sector bodies.

In December 2008, Defra (Department responsible for policy and regulations on the environment, food and rural affairs) announced its plans to have Local Planning Authorities lead on the management and coordination of SWMPs. This announcement followed on from the recommendations of Sir Michael Pitt in his independent review into the Summer 2007 flood events (Recommendations 14 and 18). The approach allows for a measured risk-based approach to sustainable growth as required by Planning Policy Statement 25 (PPS25) as well as Section 39 of the Planning Compulsory Purchase Act of 2004.

In addition, SWMPs are a positive step towards meeting the Civil Contingencies Act of 2004.

Following the summer 2007 flood when surface water flooding was responsible for approximately 70% of all properties affected, SWMPs provide a single plan to communicate the level of risk from all sources of flood risk, thereby increasing the public's awareness and understanding of flood risk.

SWMPs are a necessary step toward achieving the EU Floods Directive of mapping all sources of flood risk by 2013.

The delivery of SWMPs provides a platform for joint investments across different private and public sector organisations, often providing substantial fiscal savings.

### **Development and Planning**

Arising from the scrutiny panel's focus groups with members of the public directly affected by the summer floods of 2007, many questions were asked about the planning process which, they believed had allowed inappropriate developments in areas of flood risk. The Pitt review dedicates a chapter to examining building and planning. Other agencies are in agreement over the need to mitigate flood risk at a planning stage.

Planning Policy Statement 25, Development and Flood Risk (PPS25) is the main planning policy tool in relation to flood risk. PPS25 states that "the aims of planning policy on development and flood risk are to ensure that flood risk is taken into account at all stages of the planning process to avoid inappropriate development in areas at risk of flooding, and to direct away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall".

PPS25 is a material consideration that must be taken into account when determining a planning application and if a proposed development is not appropriately flood resistant, would exacerbate existing flooding problems then the council would be justified in refusing the application.

Sir Michael Pitt's inquiry found that the policies set out in PPS25 are sound. However, the key is the rigorous application of those policies by the local authority.

Members were reassured that for every application considered by the council's Planning Committee where flooding may be an issue, PPS25 is clearly identified and explained in the report.

## **Strategic Flood Risk Assessment**

The introduction of PPS25 Development and Flood Risk (2001) had placed a responsibility on local planning authorities to make objective judgements about flooding when drawing up land allocations for Development Plans and making decisions on planning applications for development. PPS25 explained that these judgements should be made using a risk-based approach by adopting the sequential test as set out in PPS25.

The Planning Committee agreed the Strategic Flood Risk Assessment (SFRA) at its meeting on 3 November 2006. Members of the scrutiny panel were reassured that the SFRA provided the necessary information to allow the council to guide each development towards the area of lowest flood risk, using the sequential approach advocated by PPS25.

## **Local Decision Making**

Local planning authorities are responsible for making decisions about whether or not a development will be permitted in flood risk areas. However, they are required by law to consult the Environment Agency on developments in areas of flood risk. As a result of witness testimony, members were concerned that the Planning Committee had little choice but to refuse planning applications in areas of flood risks.

The Environment Agency stated that they give advice to support the decision making process, and that they can make recommendations for certain conditions to be put on planning applications.

However, local planners indicated that they have little choice but to follow the advice of the Environment Agency. This means that if the Agency does not object to an application on flooding grounds the Local Planning Authority is likely to grant the application even if there are local objections from residents who argue that the site is liable to flooding.

This therefore led the members to question where the balance of power lies in relation to decision making on planning applications in areas of flood risk.

This is increasingly likely to become a serious issue in North Lincolnshire, as in order for North Lincolnshire to meet the government plans to build three million new homes in the UK by 2020, it has proposed to develop the Lincolnshire Lakes project. However, the land is located on a flood plain. The council is therefore in a 'catch 22' position.

## **Homeowners Protecting Their Properties**

Following the scrutiny panel's workshops with homeowners affected by the summer floods of 2007, their consensus of opinion was that the Flood Forum partners are solely responsible for the protection of their properties.

There appeared to be a lack of awareness that responsibility for mitigating flood risk does not solely lie with larger organisations. Many homeowners seemed unwilling to implement measures that could reduce the risk of flooding to their own property. More worryingly, some homeowners did not feel the need to make improvements that might protect them in the future.

This attitude concerned the members of the panel. Clearly there is a vast amount of work that is required to inform both those victims of the summer floods of 2007, and those homeowners who live in flood risk areas in North Lincolnshire.

### **Capacity Issues within Local Authorities**

During the course of the review, members have become acutely aware of the lack of capacity within the council with regard to flood prevention work. Indeed, Pitt's recommendation number 19 states that 'local authorities should assess and, if appropriate, enhance their technical capabilities to deliver a wide range of responsibilities in relation to local flood risk management'.

#### **(i) Planning**

Planning officers explained that they lack sufficient in-house technical skills to examine the effectiveness of different Sustainable Urban Drainage Systems in order to ensure that the most appropriate scheme is being proposed.

#### **(ii) Environment Agency**

The Environment Agency indicated that their limited resources are often tied up dealing with fairly low risk planning applications. The agency have suggested that their preference would be for local planning authorities to be able to deal with low risk planning applications themselves so that the agency's limited resources can be focused on medium to high risk developments, where their more detailed technical knowledge would make the most difference.

#### **(iii) Highways**

Flood Forum partners Severn Trent and Anglian Water were extremely complimentary of the work that officers from the council's Highways service had undertaken, bearing in mind flood prevention work was not contained within their job descriptions. In effect, Highways officers were working with partner agencies on an ad hoc basis whilst continuing with their "core activity". Of particular concern was the lack of a qualified drainage engineer.

When drains begin to overflow, it is often difficult, and sometimes impossible, to determine who is responsible for certain drainage assets. To help understand flood risk and resolve local disputes about who is responsible for flood risk, Pitt's recommendation number 16 is 'that local authorities should collate and map the main flood risk management and drainage assets (over and underground), including a record of their ownership and condition'.

The scrutiny panel heard that this is being undertaken. This is another example of council officers undertaking duties outside of their job descriptions for the benefit of homeowners in North Lincolnshire.

## **Gullies, Drains, Ditches and Culverts**

### **(i) Gullies**

The scrutiny panel was informed that there are some 35,000 gullies in North Lincolnshire. However, more work is needed to accurately map all of the gullies, and uniquely locate them.

Gullies are now emptied once a year on a scheduled basis with critical locations being emptied more than once.

Highways officers identified that, in their opinion, there was an issue with gully emptying. Neighbourhood and Environmental Services carry out the function, but Highways and Planning field all the complaints. Highways officers informed the Panel that the split was not helping, in their view, to develop any improvements to the service, as it adds a further line of communication to the process. Under normal circumstances the process works well, but problems occur when an additional response is required.

Members were made aware that the council now operates and deploys four gully tanker cleaners. However, the panel was told that the council is still experiencing problems cleaning gullies where special traffic management is required. In addition, offset type gullies are also a problem to clean.

Blocked gullies can lead to extensive standing water, and present a hazard.

Many gully “blockages” require extensive works to fix (new gully, connecting pipework etc). Members learned that the cost of replacing an existing gully with a new one costs in the order of £850.

Homeowners and town and parish councillors the scrutiny panel spoke to were critical of the Flood Forum for not informing them of the programme of works for clearing gullies. This lack of communication meant that all residents were unsure as to whether a gully had been cleared or had been missed off the schedule.

### **(ii) Drains**

Members were informed that the council had done a lot of work in tracing and checking the condition of its drains. However, there is much work still to do. In many areas there are no records of whether highway drains exist, what type they are or where they drain to.

There are many examples of the council’s drains having being severed by other utilities. Whilst monies can be claimed back (if the utility can be clearly identified), this is time consuming, and not always successful.

### (iii) Ditches

The council has carried out works on blocked ditches or ditches in poor condition. Often these ditches are in riparian ownership, involving a number of private households. (for example where a ditch runs behind a property) Whilst the council can enforce maintenance, it has to be mindful of the difficulties individuals may face. Once the council has undertaken clearance work, they would then write to owners to remind them of their future obligations.

Riparian ownership is a major issue for Flood Forum partners. A riparian owner is 'someone who owns property which is next to a watercourse or has a watercourse running through it'. Under common law, riparian owners have certain rights and responsibilities relating to the stretch of watercourse that flows through, or alongside their land. Members were even made aware of examples whereby homeowners had deliberately blocked waterways.

Whilst meeting homeowners affected by the summer floods of 2007, it became clear to members that many in attendance did not realise that the ditch at the bottom of their garden belonged to them and that they may be responsible for its maintenance.

Ditches need regular planned maintenance to keep them in good condition as they quickly become overgrown and less effective. The Flood Forum is currently deliberating whether the council or the relevant Internal Drainage Board should 'adopt' the ditches.

### (iv) Culverts

The council has worked with Internal Drainage Boards in many areas cleaning and maintaining culverts (underground watercourses). This is costly and difficult work, particularly if not done regularly.

The council has also implemented a large culverting scheme at Haven Road in North Killingholme, funded by the Department for Transport.

## **Warning and Information**

Under the threat of a flood, it is the Environment Agency who take primary responsibility for informing residents and businesses about the risk and the actions to be taken.

Pitt's recommendation number 35 is 'that the Met Office and the Environment Agency should issue joint warnings and impacts and impact information on severe weather and flooding emergencies to responder organisations and the public'.

The Environment Agency uses a number of ways of communicating with residents, but particularly promotes signing up to the Floodline alert service.

Of the 41 members of the public who attended the scrutiny panel's workshops, only five were aware of the Environment Agency's Floodline Warning Direct Service. Of those five, only three had signed up to the service.

Of the three who had signed up to the service, only one person had received any sort of warning via the service. That person stated the service was of value. However, the warnings tended to over state the threat. All this did was raise anxiety leading to perhaps down playing future warnings.

Comments made were that the Environment Agency web site is now much more comprehensive, both in terms of warnings and advice on preventative measures. Also, homeowners should look at the Environment Agency web site north of the Humber too due to the risks attached to the Humber.

Members of the public said that the council could utilise a text message notification scheme for any likely flooding incidents, similar to how schools text parents when their children are absent from school.

## 4 THE PANEL'S CONCLUSIONS AND RECOMMENDATIONS

Based upon the evidence presented and evaluated during this investigation, as detailed in the panel's findings and considerations, the conclusions and recommendations of the Safer and Stronger Communities Scrutiny Panel are as follows: -

### **Critical infrastructure resilience**

The extreme flooding in the summer showed just how poorly protected much of our critical public infrastructure, such as public buildings is. Critical infrastructure is defined as those systems and services so vital that their incapacity would harm the nation's physical security, economic security, or public health. The local resilience forum has a key role in helping protect the nation's critical infrastructure from all types of hazards through programs of mitigation, preparedness, response, and recovery. Examples of critical infrastructure include agriculture and food, banking and finance, chemicals, commercial facilities, critical manufacturing, drinking water/water treatment, emergency services, energy, government facilities, information technology, public health and healthcare, telecommunications and transportation

Members needed to look no further than Pittwood House, the council's corporate headquarters, which was flooded on Monday 25 June 2007. Such was the damage caused by the floods that the building was uninhabitable due to contamination of the vital utilities. Of more importance was the loss of the telecommunication network, which caused a great deal of frustration to the public.

This led the panel to question just how effective the Civil Contingencies Act is in getting Category 2 responders (such as the utilities) to plan for and respond to flood incidents.

The summer floods have highlighted that more needs to be done about this issue.

**Recommendation 1** That the Humber Local Resilience Forum be asked to review how vulnerable critical infrastructure is to flood risk, and revise risk registers and plans. The pollution and health risks should be integrated into these plans.

### **Civil Contingencies Act**

The floods certainly tested whether emergency responders were ready and able to react effectively. In general, the scrutiny panel believed the incident command system worked well. Members' experience during the summer floods of 2007 showed just how valuable joint exercises and strong working relationships with our professional partners are. Carrying out more exercises together more often could improve the current system further.



However, at the local resilience forum, consideration should be given to what extra preparation needs to be made to ensure that the risk of flooding is a high priority which all partners can respond to effectively.

**Recommendation 2** That the Humber Local Resilience Forum multi-agency emergency response plans, as identified as very high risk in the Community Risk register be reviewed to make sure that they are consistent with the Civil Contingencies Act, and that all professional partners have access to adequate resources for managing flood events.

### **Declaring an emergency**

Members were made aware that Pitt's recommendation number 43 was that 'Gold Commands should be established at an early stage on a precautionary basis where there is a risk of serious flooding'.

During the summer floods of 2007, it was at Hull that Humberside Police established its Gold Command. However, the scrutiny panel became aware that procedures for how and when 24/7 organisations (for example the Police) communicate with non routinely 24/7 organisations (for example Parish Councils) needs to be clarified.

It is crucial that all authorities present at Gold Command are clear on their responsibilities for cascading information to other organisations, and that information is shared in a timely manner.

**Recommendation 3** That the Humber Local Resilience Forum takes the opportunity as part of future training events to ensure that there is a full understanding of the role of its partner organisations and their relationship with each other.

### **North Lincolnshire Flood Forum**

Members of the scrutiny panel were impressed with the speed and commitment shown by partners to establish the Flood Forum.

This multi-agency group received national recognition for its work since the summer floods of 2007 and early 2008. However, some Flood Forum partners commented that as there had been no wide spread floods since early 2008, there was now a different role required of the Forum.

The Fire Service is represented on the Flood Forum and the Police have attended in the past. However, it could be argued that it is not an efficient use of the emergency services resources to attend Flood Forum meetings that may focus solely on engineering issues for example. Therefore, members are of the opinion that the Flood Forum would benefit from a split, with a meeting being held to discuss engineering issues, and a separate meeting of partners to discuss emergency planning issues.

**Recommendation 4** That the Flood Forum consider amending their terms of reference to allow the emergency service representatives to attend a sub-group meeting specifically for emergency planning issues only.

Flood Forum partners were unanimous in their support for the Flood Forum. However, they did express their concern that the available capacity within their respective organisations to attend meetings was reducing, especially bearing in mind that due to the boundaries of their organisations they would be attending similar meetings in North East Lincolnshire, West Lindsey, East Lindsey and Lincolnshire County.

They therefore requested that some economies of scale be created by merging some of the Flood Forum meetings.

**Recommendation 5** That the Flood Forum give consideration to inviting North East Lincolnshire Flood Forum to merge their meeting to create a Northern Lincolnshire Flood Forum, thereby sharing expertise and providing economies of scale for Flood Forum partners. In addition, Flood Forum partners should explore extending the invitation to flood forum partners in Lincolnshire.

### **Governance Arrangements**

The scrutiny panel heard how North Lincolnshire Council is covered by the Government Office for Yorkshire and the Humber (GOYH) for governance purposes. GOYH works to influence and develop government programmes and initiatives at a regional and local level. It works in partnership with relevant organisations to meet local needs.

Government Offices were set up in 1994. They manage regional programmes on behalf of central government. They also inform the development of government policies from a regional perspective.

However, the GOYH is not co-terminus with the boundaries of the Environment Agency and Internal Drainage Boards which cover North Lincolnshire. For flood protection, North and North East Lincolnshire are not covered by GOYH at all. North of the Humber is included, but south of the Humber is not included, as there is an assumption that North and North East Lincolnshire will be included in the East Midlands (which includes Lincolnshire) region.

Therefore, from a capacity point of view, officers from North Lincolnshire Council are attending governance meetings at both GOYH and Government Office for East Midlands, even though North Lincolnshire is not included in GOYHs flooding arrangements.

**Recommendation 6** That in the short term North Lincolnshire Council officers continue to attend meetings at the Government Office for Yorkshire and the Humber and consider attending meetings at the Government Office for East Midlands.

## **Communication with the public**

Across the Humber region, the floods generated extremely high levels of local, national and international media interest. Overall, media coverage during the event was generally factual and balanced. Many radio and television stations provided a good public service throughout the event. They broadcast frequent informative updates, sometimes including hourly interviews with incident staff.

These broadcasts undoubtedly helped inform the public about the seriousness of the event, and measures they could take to help themselves. However, there were examples of 'mixed messages being broadcast as a result of different partners conveying slightly different messages to the media.

**Recommendation 7** That as the lead agency in a flood emergency, the council's Public Relations Department should be more visible early in incidents to reassure the public and make sure that Flood Forum partners provide authoritative and consistent messages to the media.

Members heard that Pitt Recommendation number 67 recommended that the Cabinet Office should provide advice to ensure that all Local Resilience Forums have effective and linked websites providing public information before, during and after an emergency.

**Recommendation 8** The scrutiny panel suggests that a system is developed, whereby each Category 1 Responder organisation can post relevant public information on (or linked to) a designated space on the same web-site in order that it can be more easily checked by the public and other organisations.

**Recommendation 9** That once this provision is in place, members of the public, particularly those in flood risk areas, be advised of the web site address so that they can access the site during an emergency.

NB Recommendations 8 and 9 are in addition to and not instead of the traditional communication mediums of local television and radio as members acknowledge that not all North Lincolnshire residents have access to the internet.

## **Communication with North Lincolnshire Council**

Problems for affected North Lincolnshire residents were exacerbated as Pittwood House was flooded. Whilst the flooding of the council's corporate headquarters would normally have no effect on local residents, the fact that the council's entire telecommunications network was 'wiped out' meant that local residents had no way of contacting the council. It also meant that the council's website was also unavailable for a considerable period of time.

The council now has a designated customer contact centre based away from Pittwood House. In addition, all the council's IT servers have been moved to locations that should not be affected by future flooding emergencies. Similar problems should not therefore occur again.

Members learned that Pitt recommendation number 66 is for 'local authority contact centres to take the lead in dealing with public advice before, during and after a flood, redirecting calls to other organisations where appropriate'.

**Recommendation 10** That the feasibility of introducing a system to enable the council's customer contact centre to re-direct callers be investigated. Should this recommendation be implemented, the Flood Forum should ensure that the customer contact centre has the necessary information to ensure that the member of public is redirected appropriately.

### **Communication with Parish Councils**

As part of the review, the scrutiny panel spoke to a cross section of town and parish councils. The town and parish councils were selected based on whether they did or didn't have a Community Emergency Plan and whether they were flooded.

Like members of the public, the scrutiny panel is aware that town and parish councils simply had to cope as best they could during the summer floods of 2007. Town and parish councils in North Lincolnshire generally did not have emergency plans or contact numbers and little or no involvement with the Local Resilience Forum. They did however believe that there were many ways in which they could assist (and were willing to do so).

Arising from the town and parish council workshop, members were greatly encouraged that town and parish councils were willing to take on a more proactive role in response to an emergency providing they have the necessary tools and support.

**Recommendation 11** That for any emergency affecting North Lincolnshire, town and parish councils be provided with emergency contact details of Category 2 responders to enable them to report local conditions (such as road conditions) for example.

Following the summer floods of 2007, the council implemented a 'flood buddy' scheme. This is a scheme that enlists the help of either a town and parish councillor or a local resident to notify fellow parishioners of any flood risks. However, not all town and parish councils have elected to join, and after 15 months work, there are still 15 not engaged in this scheme.

Members heard from some town and parish councillors who thought the initiative was excellent. However, some town and parish councils were not overly impressed with the flood buddy proposal as they felt it was an impossible task, particularly in the larger town and/or villages.

Members, however, were of the opinion that any initiative that could improve communication between the Flood Forum and town and parish councils, as well as between the town and parish council and parishioners should be supported.

**Recommendation 12** That the Flood Forum actively promote the flood buddy scheme and actively promote the benefits of the initiative to the 15 remaining town and parish councils which have not signed up to the scheme.

## **Community Emergency Plans**

As was explained previously, the scrutiny panel spoke to a selection of town and parish councils who were affected by the summer floods of 2007. Members learned that there is no statutory responsibility for town and parish councils to plan for, respond to, or recover from emergencies. However it is good practice for communities to identify hazards and make simple plans on how they may respond.

The Humber Local Resilience Forum has drafted Community Emergency Plans. These are comprehensive documents which require the town or parish council to identify how it will respond to an emergency.

However, the documents do not place any formal requirement on town and parish councils to make emergency plans. Any participation by the town or parish council is purely voluntary

It should also be recognised that the town or parish council is not an emergency service. It is not trained, equipped, empowered or resourced to carry out the functions of an emergency service. The response should generally be confined to looking after the welfare of people in the community or helping to maintain the infrastructure

However, town or parish councillors identified that whilst they were willing to complete the Community Emergency Plan, they felt that they lacked the necessary skills and expertise to complete the document.

Members believe that it would be useful for North Lincolnshire Council to take the lead on completing the Community Emergency Plan, providing support to aid its completion, to those parishes most likely to be affected by flooding.

**Recommendation 13** That the council's Emergency Planning Team formulates a plan of how they intend to assist town and parish councils with the completion of their Community Emergency Plans. In addition, the council will provide more than just a skeleton document to enable all parishes to create their own emergency plans for use in appropriate circumstances.

## **Internal Drainage Board**

An internal drainage board (IDB) is a type of operating authority which is established in areas of special drainage need in England and Wales with permissive powers to undertake work to secure clean water drainage and water level management within drainage districts. The area of an IDB is not determined by county or metropolitan council boundaries, but by water catchment areas within a given region.

Much of their work involves the maintenance of rivers, drainage channels, ordinary watercourses, pumping stations and other critical infrastructure, facilitating drainage of new developments, the ecological conservation and enhancement of watercourses, monitoring and advising on planning applications and making sure that any development is carried out in line with legislation (PPS 25). IDBs are not responsible for watercourses designated as main rivers within their drainage districts; the supervision of these watercourses is undertaken by the Environment Agency.

North Lincolnshire is served by ten IDBs. Members of the Flood Forum expressed their concern that appointments, attendance and participation by elected members at IDBs is ad hoc at best. Forum partners believed that appointments should be widened to include council officers as well as members of the public who have an interest in the work of IDBs.

**Recommendation 14** That in addition to elected members, the council expand its Internal Drainage Board appointment network to include council officers and other appropriate representatives.

**Recommendation 15** That all council appointments to Internal Drainage Boards receive training on the role and responsibility attached to the appointment on an annual basis.

Internal Drainage Board witnesses informed the scrutiny panel that there is an element of frustration when comments made on planning applications by the Board are not given 'due care and attention' by the planning authority.

**Recommendation 16** That the council engage in a dialogue with all Internal Drainage Boards to make sure that processes are in place to ensure that the Boards comments on planning applications are considered appropriately.

## **Planning**

Members were acutely aware that residents affected by flooding were critical of the council for allowing housing developments in the floodplain.

Representatives from the Environment Agency informed the members that by definition all 19,000 homes flooded in England from rivers in the summer floods of 2007 are in the floodplain.

Data collected by the Environment Agency on a limited sample of 580 of the 19,000 properties indicated that around 28 per cent of these were built in the last 25 years. This only reaffirms the comments made at the scrutiny panel's workshops.

The Government's planning policy on development in flood risk areas, PPS25, was updated in January 2007.

Pitt says that PPS25 should be applied "rigorously" and that the 'exception rule' should not be used to build in inappropriate areas. Developers should, "make a full contribution to the costs both of building and maintaining any necessary defences."

**Recommendation 17** It is essential that the council policy on development in the floodplain, PPS25 in England is firmly applied. Where development does go ahead in areas of flood risk, the council must ensure that the developers are responsible for achieving adequate flood risk management.

Members were also concerned about the perceived weakness in assessing flood risk in the planning application process. The Environment Agency flood risk zones were based on river, not surface water flooding. Planning applications outside these zones did not trigger the need for an automatic flood risk assessment.

Although the Environment Agency does provide advice, the members believe that the council's Planning Committee need qualified technical assistance when considering planning applications in flood risk areas.

**Recommendation 18** That the Service Director Highways and Planning undertakes a review to determine whether the council has sufficient technical capability and if necessary ensures that a suitably qualified individual is available to advise the Planning Committee about drainage issues and flood risk implications for each development. Once completed, the review to be shared with this scrutiny panel for information.

**Recommendation 19** That all North Lincolnshire councillors receive training on an annual basis on the impact of flooding on planning applications and the role of the Environment Agency as a statutory consultee on planning applications.

## **Flood Relief**

The Environment Agency is responsible for the maintenance of "main rivers and strategic streams." For non-main rivers and streams the responsibility for their maintenance and the removal of obstructions etc. lies with the riparian owners of the land adjacent to the watercourse. Where a stream passes through a culvert underneath a highway for which the council is the highway authority, then the council is the responsible authority for the watercourse.

The council has permissive powers, rather than a statutory obligation. Under the Land Drainage Act, the council has the power to serve notice on landowners to adequately maintain a watercourse, and can prosecute for non-compliance. The council cannot however ask a landowner to improve drainage.

**Recommendation 20** That North Lincolnshire Council, along with town and parish councils, identify and inform those landowners who have responsibility for maintaining any waterway under their ownership that the council will consider proactively making use of its powers to serve enforcement orders on landowners who do not comply with requests to maintain their ditches and/or watercourses.

In addition, the Local Government Act, 2000 provided local authorities in England and Wales with a new power of 'well-being', which entitles them to do anything that might achieve the promotion or improvement of the environmental and social well-being of their area. Where a landowner cannot afford or is unwilling to repair ditches or water courses and this has a detrimental effect on peoples lives and properties, then the council has the power under this Act, as well as powers attached to the Land Drainage Act and Highways Act to carry out any necessary work, with the possibility that it can claim back the costs from land owners or their estate.

**Recommendation 21** That the council develops a policy whereby if a riparian land owner cannot afford or is unwilling to repair water courses, then under the Local Government Act 2000, they should consider the merits of carrying out the necessary work and where possible recover in full the cost of works back from the land owners or their estate.

### **Environment Agency flood warning service**

During the scrutiny panel's investigation, members learned that the Environment Agency operate a Floodline Warnings Direct service which warns people about flooding from major rivers. However, the service does not cover the risk of flooding from sewers, drains, groundwater or ditches. The flood warnings are issued when river or sea levels reach a threshold or trigger level, or when the weather forecast show that high levels are imminent. The Environment Agency try to be as specific as possible about which areas will be affected before issuing a warning. However, members learned that a balance has to be struck between being accurate and alerting people soon enough so they can react appropriately.

### **Flood warning take-up**

The Environment Agency informed members that in England and Wales, only 41 per cent who could receive flood warnings by phone or text are signed up to receive them. This equates to 276,000 registered customers.



The difficulty was that in North Lincolnshire, no properties were flooded as a result of rivers overflowing. Therefore, the service is not as beneficial to North Lincolnshire residents as it perhaps could be.

However, the service is completely free. Although it cannot predict surface water flooding, if residents in North Lincolnshire signed up to the service they would at least be made aware when water levels were at a dangerously high level.

The Environment Agency pre-registers customers using a process known as the 'opt-out approach'. This is because the Environment Agency use publicly available electoral roll and telephone number information to match with properties at risk, and then register people. They then have to opt-out if they don't wish to receive this service.

**Recommendation 22** That the Flood Forum actively promote and encourage those victims of flooding to sign up to the Environment Agency's Floodline Direct Warning Service.

### **Flood warning for surface water flooding**

Members were disappointed to hear that the Environment Agency is not currently responsible for surface water flood risk. The Environment Agency's forecasting and warning systems are not designed to deal with the widespread surface water flooding that occurred.

Whether cost effective and reliable warning systems will be technically feasible or viable remains to be seen. Urban drainage systems are complex and dynamic, changing rapidly with development, and it would be a costly challenge to map and model these and provide detailed warnings.

However, the members would like to see the Environment Agency explore the feasibility of them extending their current warning system to cover these forms of flooding as far as science and technology can reasonably allow. This would depend on the necessary resources being available.

**Recommendation 23** That the Flood Forum ask the Government to consider the Environment Agency's proposals to develop surface water risk mapping and flood warning tools for their professional partners with a view to later wide scale application.

### **Inland flooding overview**

Members learned that two-thirds of the 55,000 homes and businesses affected by the summer floods of 2007 were flooded because drains, culverts, sewers and ditches were overwhelmed. This is called 'surface water flooding'.

Local authorities, water companies, other utilities and the Highways Agency and landowners are the main organisations responsible for maintaining these facilities.

In London, virtually all of the 1,400 properties flooded were due to surface water flooding. In the South-East and Yorkshire and Humberside regions, around 70 per cent of the properties flooded were from surface water. Just over half the properties flooded in the East and West Midlands and South-West regions were from surface water flooding. Understandably, people who are flooded are not necessarily concerned about what caused it, but rather what impact it has on them. The workshops held with members of the public showed that the public are confused over who is responsible for surface water flooding, in particular. No one organisation has overall responsibility and there has not been enough attention on managing surface water flooding in a co-ordinated way.

### **Mapping surface water flood risk areas**

The scrutiny panel heard from Flood Forum partners that they had been extremely proactive in working together to map important ditches and surface water flood risk areas and exploring how to develop countywide flood risk GIS maps to enable better modelling.

This provision was in line with Pitt's recommendation number four in 'that the Environment agency should work with partners to urgently take forward work to develop tools and techniques to model surface water flooding'.

**Recommendation 24** That the Flood Forum partners co-ordinate the sharing of information on GIS maps, working in collaboration and sharing information with the Environment Agency.

### **Gullies, drains, ditches and culverts**

At the moment, no single organisation is responsible for surface water drainage. Sewers can be the responsibility of the council, water companies, householders or private owners.

Ditches and dykes can belong to the Environment Agency, Internal Drainage Boards, the council or neighbouring landowners or householders. Floodwater can pass from private to public responsibility and back. This responsibility can also pass between the relevant organisations. Each location is unique.

When drains begin to overflow, it is often difficult, and sometimes impossible, to determine who is responsible for certain drainage assets.

To help understand flood risk and resolve local disputes about who is responsible for flood risk, Pitt's recommendation number 16 is that 'local authorities should collate and map the main flood risk management and drainage assets (over and underground), including a record of their ownership and condition'. which the scrutiny panel would whole heartedly support.

Members learned that the Flood Forum has already undertaken this task, even before Sir Michael Pitt made his recommendation.

**Recommendation 25** That members of the Flood Forum be congratulated for the excellent proactive work they have undertaken with regard to surface water management.

Members learned that the council has invested heavily in new machinery to assist it in cleaning gullies. The council now has at its disposal four gully tanker cleaners. These machines allow the council to clean all its gullies on an annual basis. However, the panel was told that the council is still experiencing problems cleaning gullies where special traffic management is required. In addition, offset type gullies are also a problem to clean.

Members were informed that currently the council's Neighbourhood and Environmental service carries out the gully emptying function, but Highways and Planning field all the complaints from residents. As a result of comments made during the investigation, the scrutiny panel interviewed members of the Council Management Team Communities Board to explore this issue further.

Arising from those discussions, the panel was reassured to hear that the Chief Executive had investigated and resolved the operational difficulties.

**Recommendation 26** That in the immediate future, the council maintains its annual gully cleaning schedule as a minimum, and as soon as practicable, the council undertakes a review to determine which gullies require cleaning on a more frequent basis.

**Recommendation 27** That the Chief Executive ensures that council services work more closely together to ensure that economies of scale are achieved when flood prevention activities are a) being planned and, b) undertaken.

Despite the 'operational difficulties', members of the scrutiny panel heard that in the main members of the public and local parishes were more than happy with the work undertaken by the council in cleaning and clearing gullies. However, town and parish councillors and members of the public were critical in that they were not aware of the gully cleaning schedule. Without this information, local residents could not inform the council if the gully had become blocked or had been missed off the schedule.

**Recommendation 28** That as soon as is practicable, the council serve notice to all town and parish councils of its gully cleaning programme, with the aim of the town or parish council helping to disseminate this information to all local residents.

## **Public Advice**

Members learned that since the summer floods of 2007, Flood Forum partners have published many informative articles through the council's magazine Direct, local newspapers and various websites. In addition, the Environment Agency has excellent informative brochures about flooding, and the National Flood Forum also provides very detailed information.

Members of the Flood Forum were extremely honest when they admitted that there is more that they could do to inform residents in North Lincolnshire of what, how and when they could protect their properties.

Pitt's recommendation number 60 states that 'the Government should implement a public information campaign which draws on a single definitive set of flood prevention and mitigation advice for householders and businesses, and which can be used by media and the authorities locally and nationally'.

However, the panel believes that the Flood Forum should not wait for the government to implement this recommendation and should action it immediately.

**Recommendation 29** That as soon as practicable, the Flood Forum should publish a single definitive set of flood prevention and mitigation advice for householders and businesses in North Lincolnshire which can be used by the media and the authorities locally.

Informing local residents of any immediate threat of flooding is a very difficult task. However, that is not to say that the Flood Forum should not at least try to communicate with residents when their properties may be in danger. There are now many innovative communication tools at a council's disposal which could be utilised to raise awareness of the dangers of torrential rainfall.

**Recommendation 30** That the Flood Forum and/or North Lincolnshire Council investigate the use of websites, social networking sites and text alerts in relation to warning residents of the immediate danger of flooding.

NB Recommendation 30 is in addition to using the Local Links, libraries, council offices etc.

Members were made aware that the National Flood Forum had launched a directory of flood protection products and services, known as the 'Blue Pages'. The pages provide advice on flood resilience as well as advice and guidance in the event of flooding. It aims to give consistent advice to the public.

Arising from the member's workshops with victims of the summer floods of 2007, one area of confusion was the use of sandbags and the responsibility for providing them. Pitt's recommendation number 26 stated 'that the Government should develop a single set of guidance for local authorities and the public on the use and usefulness of sandbags and other alternatives, rather than leaving the matter wholly to local discretion'.

The scrutiny panel wholeheartedly supports Pitt's recommendation number 26 as the council was unfairly criticised by members of the public for the lack of and poor distribution of sandbags, before, during and after the summer floods of 2007. Residents affected by the summer floods of 2007 assumed that sand bags would protect their properties.

However, the Service Director Highways and Planning informed the scrutiny panel that the council did not stock nor distribute sand bags to residents as they were not waterproof, required some kind of membrane to be effective and were difficult to dispose of after the event.

**Recommendation 31** That aligned with recommendation 30, householders and businesses in North Lincolnshire be informed of the unsuitability of sand bags and instead be advised of the alternatives.

## **Drainage**

Pitt recommendation number 19 states that 'local authorities should assess and, if appropriate, enhance their technical capabilities to deliver a wide range of responsibilities in relation to local flood risk management'.

Members learned that officers in the council's Highways and Planning service are undertaking flooding duties in addition to their current roles. The scrutiny panel was incredibly impressed with the goodwill shown by officers from Highways and Planning in undertaking their flooding duties. However, this situation is not ideal. There are positions that do require a certain level of expertise, with drainage engineers being one of those. This lack of flooding provision is to the detriment of North Lincolnshire.

The scrutiny panel is mindful of the potential resource implications but believes that additional resources should be sought from central Government to fund a dedicated flooding team.

**Recommendation 32** That the Flood Forum ensures that suitably qualified officers at the council are appointed and that they are able to take the lead responsibility for checking the condition of drainage assets (watercourse and ditches) and sharing information with the Forum.

## **Pitt's Recommendation Number 91**

Recommendation 91 states that 'each Oversight and Scrutiny Committee should prepare an annual summary of actions taken locally to manage flood risk and implement this Review, and these reports should be public and reviewed by Government Offices and the Environment Agency.'

The panel received a presentation from the Service Director Highways and Planning detailing all the flood prevention schemes either in progress, completed or due to start. The list is attached to the report at Appendix 1.

**Recommendation 33** That in line with Pitt's recommendation number 91, this scrutiny panel will, on an annual basis, invite the relevant Service Director and Cabinet Member to a public meeting of the panel to discuss 'the local action taken to manage flood risk in North Lincolnshire'.

## APPENDIX 1

### Pitt Recommendation 91 states:

**“Each Oversight and Scrutiny Committee should prepare an annual summary of actions taken locally to manage flood risk and implement this Review, and these reports should be public and reviewed by Government Offices and the Environment Agency.”**

### Among the action taken: June 2007 to date:

- Establish the Flood Forum coordinating all agencies with responsibility for managing surface water in North Lincolnshire. Sub Groups investigate flooding incidents and operational issues, coordinating a response and actions.
- Joint actions with other Agencies
- Coordinating responses to Government Reports, the Pitt Review, LGA and LGiU papers on flooding and recovery
- Liaison with national and regional groups
- Bids for funding to DfT for emergency highway works for flood damaged highways, DEFRA/EA for flood defence works
- Action design and construction for flood defence works and highway repairs funded through external funding bids and £1.7m allocated by the Council in 3 year capital allocation.
- Presentations and consultations with 43 parish councils
- Planning development embargo at Goxhill pending completion of Anglian Water drainage study
- Held a flood fair attended by 274 members of the public, 17 Councillors and 2 MPs.
- Review flood warning system to react to EA issued warnings
- Establish a flood buddy system to update on progress and provide flood warnings
- Develop a Flood Compendium
- Progress mapping of flooding risk areas and drainage systems concentrating initially on areas severely affected in June 2007 flood event
- Started GIS mapping
- Progress investigations of 600 flood locations
- Progress drainage inventory
- Commence electronic data inventory of gully locations
- Undertake weekly review of new planning applications to identify risks associated with development and provide feedback to Development Control on the implications/risks
- Review gully cleaning priorities and identify critical locations for more frequent cleaning
- Review representation on Internal Drainage Boards
- Progress funding bid for Property level flood protection through DEFRA, consulting with 700 residents and assessing 112 bids
- Prepare Flood Recovery Plan

- Update Highways Emergency Procedures Plan – duty manger system to respond to emergencies

### **Key Drainage Projects undertaken since the 2007 flooding**

- Haven Road, North Killingholme culvert and embankment stabilisation
- Cornwall Street, Clay Lane, Kirton Lindsey relief drainage scheme
- King Edward Street, Belton relief drainage scheme
- A161 Haxey Lane, Haxey drainage improvement
- Wrawby Road, Brigg cemetery drainage
- Main Street, Ealand drainage improvement
- Flood Defence bunds at Barrow Road, Barton; Bigby High Road, Brigg and Scawby Brook
- Ditch improvements at North and South Killingholme, Jeffrey Lane, Belton, Station Road, Kirton Lindsey
- New Drains at Kirton Lindsey, Scawby, Brigg, South Killingholme, Wroot, Gunness
- New culverts at Winteringham, Kirton Lindsey
- Drainage Studies at Barrow upon Humber, Haxey, Kirton Lindsey and Low Burnham