

**Public
Key Decision - No**

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter: Overview and Scrutiny Flooding Task and Finish Study

Meeting/Date: Overview and Scrutiny Panel (Customers and Partnerships) – 8th July 2021
Cabinet – 15th July 2021

Executive Portfolio: Councillor J Neish – Executive Councillor for Strategic Planning

Report by: O Morley – Corporate Director (People)

Ward(s) affected: All

Executive Summary:

Cambridgeshire and its neighbouring counties experienced widespread flooding in December 2020 and January 2021. Huntingdonshire was particularly affected. Subsequently, an Overview and Scrutiny Task and Finish Group was established to conduct an evidence based investigation into the nature and extent of the flooding, the lessons that could be learnt and the steps that might be taken to ensure communities are adequately prepared going forward.

A focussed study methodology was devised. It identified primary sources of evidence, namely Cambridgeshire County Council, the Environment Agency and Anglian Water. Separate meetings were held with each of these organisations. The report summarises the evidence submitted, the discussions that took place and the actions agreed with partners that address the Terms of Reference.

Recommendation(s):

The Cabinet is

RECOMMENDED

- a) **to publicise links to flooding advice through the District Council's own communication channels and forward the advice to all Town and Parish Councils;**
- b) **that the Council works with the County Council to support the establishment of local flood groups as a means to develop community resilience against future flooding and as an important additional source of information for forecasting flooding;**

- c) a study be undertaken by a group of technical experts to understand fully the causes of floods linked to climate change, to look at the issue of cumulative impacts and to make a series of recommendations to feed into the next SPD document review, ensuring the refreshed document responds to changing realities and technology;**
- d) to work with Cambridgeshire County Council and other partners to create a case conference system to evaluate technical advice on flood mitigation on those most complex applications,**
- e) to collaborate with partners on the development of a joint drainage and waste water management plan, and**
- f) that the Council support the County Council in its project to map local water courses and call for this mapping activity to begin with Huntingdonshire.**

1. PURPOSE OF THE REPORT

- 1.1 This report contains the background, justification, process, conclusions and recommendations arising from a Task and Finish Group study into the flooding in Huntingdonshire in December 2020.

2. BACKGROUND

- 2.1 Cambridgeshire and its neighbouring counties experienced widespread flooding in December 2020 and January 2021. Huntingdonshire was particularly affected. It was immediately decided to hold localised flooding conferences in the areas that were most affected to capture experiences and data. This decision was led by Councillor Jon Neish in his capacity as Executive Councillor with responsibility for emergency planning. Following the conferences, an Overview and Scrutiny Task and Finish Group was established to conduct an evidence based investigation into the nature and extent of the flooding, the lessons that could be learnt and the steps that might be taken to ensure communities are adequately prepared going forward. It is emphasised that the study focussed on the whole District rather than just those areas affected by the flooding.
- 2.2 The Task and Finish Group (The Group) was established by the Overview and Scrutiny Panel (Customers and Partnerships). It was Chaired by Councillor Darren Tysoe and also comprised Councillors Sarah Conboy, Steve Corney, Ian Gardener and Richard West.
- 2.3 The rationale for the study was that the flooding throughout Huntingdonshire during December 2020 affected the lives of residents in multiple locations and involved significant multi-agency resources. This was not the first flooding event within Huntingdonshire, and it was important to establish its causes, the likelihood of future flooding and what action might be taken before and during to mitigate the risk and impact of future flooding.

3. METHODOLOGY

- 3.1 The Working Group met to consider its Terms of Reference, approach, sources of evidence and outcomes to be achieved. The aims of the investigation were to:

- ❖ **Understand what happened:**
- ❖ **Review the response:**
- ❖ **Consider future prevention/mitigation:**

- 3.2 Three primary sources of information were identified, and each was invited to a separate meeting to discuss the issues under consideration:

- ❖ Cambridgeshire County Council

Q Carrol

Joint Interim Assistant Director

H Ellis	Principal Sustainable Drainage Officer and Flood Risk Contract Manager
S Grace	Director Customer and Digital Services
E Price	Local Highways Officer

❖ Environment Agency

P Hulme	Flood and Coastal Risk Manager
P Burrows	Flood and Coastal Risk Manager

❖ Anglian Water

J Glerum	Regional Flood Risk Manager
S Love	
A Shaw	Regional Network Manager

3.3 The Group was supported by N McCurdy, Corporate Director (Place), and J Illingworth, Emergency Planning Adviser.

3.4 The Group wants to place on record its appreciation of the willingness of the three partner organisations to assist with the study. All have been represented at an appropriately high level and have provided very full and open responses to Members' questions. The partnership approach adopted by all should be recognised and will be beneficial if it is carried forward. The findings also have been informed by the contributions made by groups and representatives in the course of the local conferences. The joint progress that has been made against the aims is described in the following paragraphs.

4. UNDERSTANDING WHAT HAPPENED.

4.1 There were two separate but related flooding incidents over the festive period. Surface flooding occurred largely before Christmas, and river flooding happened over Christmas and beyond. The Group heard that the period leading up to the flooding events of Christmas 2020, had already been very wet, with ground levels already approaching the point at which they could absorb no more rain.

4.2 Members were informed that there was significant rainfall on already saturated ground and the infrastructure was not able to cope. There was 188mm of rainfall in December 2020, which was 195% of what was expected. This was compounded by the fact that the three preceding months were wetter than expected. The soil moisture deficit in December was 3mm. Soil moisture refers to the amount of moisture held in a given

amount of soil. It determines how much rain goes into rivers and streams or, in extreme cases, into flooding. A figure of 3mm indicates that the soil was virtually saturated. In other words, the soil already contained 97% of the water that it was able to absorb. There followed 55mm of rainfall over Christmas. The soil moisture deficit at the end of January 2021 was 1mm. This demonstrates there was a long lead in time where the catchment was saturated over a long period of time. Soil moisture is one of the metrics employed by the Environment Agency to monitor water levels.

4.3 The County Council recorded 659 reports of flooding incidents across the County. Over 600 of these were for Huntingdonshire. (See paragraph 5.4).

4.4 Anglian Water provided analysis in terms of the water that went through its systems and of the flooding of its assets. The greatest impact was experienced on foul sewerage. To put the impact into context:

- The workload was five times greater than was usual for the period.
- 80,000 customer calls were received
- 30,000 jobs were raised
- Anglian Water agreed 28 Temporary Local Enforcement Positions with the Environment Agency, whereas there had previously only ever been six of these.

4.5 What was presented was a consistent view that the circumstances either side of Christmas 2020 were exceptional. The response and recovery provide important learning and action points.

4.6 One key clarification received during the review, was that no responsibility within the public agency network for the provision of sandbags exists. HDC has a supply of sandbags for use when there is a threat to life. The Fire and Rescue service decide when / where they should be deployed. Some were deployed on 23rd December.

5. THE RESPONSE

Recovery

5.1 The District Council initiated a series of local flooding conferences across areas directly affected by both surface water flooding and the threat of river flooding. In addition to these, the County Council held conferences in the other affected areas of Buckden and Broughton. Information generated from them have been fed into the study and into the immediate and ongoing responses.

5.2 After the initial response, the Environment Agency entered a recovery phase. It inspected all assets which were designed to prevent or alleviate flooding issues, most of which served their purpose. In total 4,500 inspections took place. The Environment Agency used drones to do some inspections; however, 80% of inspections were completed on foot. Members were informed that 30 failures of assets were identified and that each would require remedial action to be taken.

- 5.3 The Cambridgeshire and Peterborough Local Resilience Forum (CPLRF) is a multi-agency group made up of emergency services, local authorities, military, public health organisations and others who have a role to play should a disaster or major emergency occur. The Group has learnt that the full CPLRF was convened and met throughout Christmas. It subsequently held a debriefing session. The outcome will be made available to the partner authorities.
- 5.4 The County Council has been in touch with all those who contacted it to establish whether any assets/infrastructure for which the County Council was responsible required maintenance works.
- 5.5 The Environment Agency was closely liaising with Cambridgeshire County Council, to enable the latter to complete a Section 19 (Floods and Water Management Act) report. The report set out which authorities had relevant flood risk management functions, and whether those authorities had exercised those functions. The Environment Agency was also collaborating with the County Council on the Flood Action Plan.

Information

- 5.5 The information that was available to the responsible organisations during the flooding was frequently referred to during the investigation. The Environment Agency receive weather warnings from the Met Office. The latter warnings are issued when rainfall happens; however, Environment Agency Warnings relate to river levels. There is, therefore, a significant difference between the two types of Warning.
- 5.6 Environment Agency Warnings are based on main rivers such as the Great Ouse. In December much of the local flooding was caused by water from gullies and ditches, which are not part of the Environment Agency warning system. This is a learning point.
- 5.7 Whenever a flood Warning is issued the Environment Agency reviews its effectiveness and timeliness. The Environment Agency's communications and engagement function were analysing the flooding events of December 2020 for this purpose. It was hoped that the Environment Agency would secure funding for an improved and more sensitive warning system which would provide better early notice of issues in the future. The Group suggested that consideration should be given to including information on moisture deficit into the telemetry as this seemed to have been a key factor in the December 2020 floods. Telemetry is the in-situ collection of measurements or other data at remote points and their automatic transmission to receiving equipment for monitoring. Furthermore, the Group heard that the system might be improved by effectively drawing on intelligence from the ground. In paragraph 5.14 the point is made that using local knowledge held by the community helped significantly when working out the conditions that made areas susceptible to flooding.
- 5.8 The public were not always clear about the differences between Met Office and Environment Agency Warnings. Importantly, both took account of flooding defences. However, the Environment Agency issued three types

of communication in relation to flooding. The Environment Agency had a workstream on how well the public understands its advice and how it was acted upon. It was already known that there was a need for education on warnings. The Environment Agency would act on this.

5.9 The County Council is compiling comprehensive maps of the County, which clearly identifies where each watercourse is located and who is responsible for its maintenance and when flooding arises. The District Council has provided large scale maps to the affected parishes to enable them to mark where flooding occurred. The returned maps have been forwarded to the County Council. The maps should improve information flow as part of the County Council's wider commitment to improve reporting systems. Recognising the significance of having a clear picture of land ownership is key in being able to take proactive steps to address flooding, it is **recommended that the Council support the County Council in its project to map local water courses**. This will enable HDC and CCC appropriately to hold riparian owners to account. Whilst recognising the complexity of establishing a complete record of all awarded courses, given their historic and at times poorly documented nature, and the need for us to be prepared to respond when additional information is brought to light and it is further **recommended that the Council call for this mapping activity to begin with Huntingdonshire**.

5.10 The Group has been acquainted with the functions of regional flood and coastal committees (RFCC). There are twelve such regional Committees. They have an important role in helping to protect communities from flooding and coastal erosion. They help the Environment Agency and partners to understand local issues better, and to balance local and national priorities. The Anglian (Great Ouse) RFCC covers the eastern region. More specifically in relation to the investigation, it looks into the wider catchment water management. Members from the County Council sit on the Committee. It is suggested that establishing improved communications channels with them on water management could be beneficial to the Council.

5.11 The next section of the report states the importance of localised knowledge and makes recommendations on how to improve its availability.

Preparedness

5.12 It has been clearly established that individual households are responsible for protecting their own properties. The Group looked at how individuals might be made aware of and assisted better to understand the measures they might adopt. There are many websites that contain extremely useful information in respect of preparing for flooding, what to do during a flood and what to do after a flood occurs. The following are recommended by the Environment Agency:

- How to plan for flooding - <https://flood-warning-information.service.gov.uk/plan-ahead-for-flooding>
- What to do in a flood - <https://flood-warning-information.service.gov.uk/what-to-do-in-a-flood>

- What to do before, during and after a flood - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/403213/LIT_5216.pdf
- Prepare for flooding <https://www.gov.uk/prepare-for-flooding/future-flooding>

These links have been provided to some Parish Councils to post on their websites. It is **recommended the links to flooding advice are publicised through the District Council's own communication channels and forwarded to all Town and Parish Councils**. The District Council's flood advice page has been updated and contains a number of useful links. <https://www.huntingdonshire.gov.uk/environmental-issues/flooding/>.

- 5.13 The Working Group also discussed preparedness at the community level. Community resilience was mentioned at all The Flooding Study Group's meetings. In particular, discussion took place on the potential benefits of local flood groups. All the organisations that participated in the study recognised the value of local flood groups and confirmed they are committed to supporting them.
- 5.14 Local flood groups have local knowledge, including the ability to augment centrally held data, by identifying who is responsible for areas of riparian land. They can recognise problems and act when issues arise. To be successful they need to have communication and engagement channels with key agencies. This will help the Environment Agency and Anglian Water to improve their telemetry.
- 5.15 It is, however, recognised that residents require the knowledge and training to recognise issues when they arise. The Group welcomed the decision of the County Council to provide more support to community flood groups, such as training, providing equipment and establishing groups where they do not exist and to develop a toolkit. Initially, flood groups will be established in Buckden, Brampton, Offord, Godmanchester and Kimbolton.
- 5.16 Toolkits are widely used. Some recommended examples are:
- Northamptonshire Flood Toolkit - <https://www.floodtoolkit.com/>
 - Devon & Cornwall Flood Resilience Pathfinder - <https://www.befloodready.uk/>
- 5.17 Other recommended examples are the Welney Floodwatch Page and the Riseley Flood Group. They use social media effectively to inform residents about the risk of flooding. The groups and the Environment Agency are engaged in two-way information flow.
- 5.18 A further example, which has been drawn to The Group's attention is the Norfolk Association of Local Councils, which has role in capturing knowledge.

- 5.19 It is suggested that the initial contact would be the Parish/Town Council or the District Councillors to identify volunteers for the flood groups.
- 5.20 It is **recommended that the Council works with the County Council to support the establishment of local flood groups as a means to develop community resilience against future flooding and as an important additional source of information for forecasting flooding.**

Infrastructure

- 5.21 The Environment Agency is responsible for the maintenance of rivers, Internal Drainage Boards are responsible for ditches and the County Council has a regulatory role in respect of other watercourses.
- 5.22 In 2021/22, The County Council will be increasing the gully maintenance budget.

The Role of Planning

- 5.23 The Group has followed up on questions at the local flooding conferences about the impact of planning decisions on flooding. Members have been advised that good developments address flooding risks and actively manage them. Furthermore, there is no evidence that the flooding either side of Christmas was caused by more recent developments. The Group has examined the planning position relating to individual dwellings and small-scale developments and the cumulative effect of applications from a flooding perspective. Discussion took place on whether there might be a benefit in reviewing the Supplementary Planning Document (SPD) 2017, and subsequent discussions have taken place with Planning experts. This document is a legal Countywide document that all Local Planning Authorities have adopted, and covers a wide range of issues, such as future approvals and the five-year housing land supply. The power to change this does therefore not sit with Huntingdonshire alone.
- 5.24 The Group is, nevertheless, of the view that work does need to be undertaken in this area. It is suggested that initially **a study should be undertaken by a group of technical experts to understand fully the causes of floods linked to climate change, to look at the issue of cumulative impacts and to make a series of recommendations to feed into the next SPD document review, ensuring the refreshed document responds to changing realities and technology.** These recommendations can feed into a much broader review of the SPD at the appropriate time, which is likely to involve all the local authorities working with the Environment Agency on the Strategic Flood Risk Maps to include further modelling on climate change. The Internal Drainage Boards and the Middle Level Commissioners also would have a role to play here.
- 5.25 The Environment Agency is involved in work on the spatial framework for the Ox-Cam Arc. It will ensure that flooding risk is factored into the plans, mitigating the flooding risk on the largest foreseen development project in the District.

- 5.26 The Group has discussed flood risk in relation to planning applications. It is suggested that relevant officers from partner organisations work through technical options arising from complex consultation responses in a case conference type of arrangement. **It is recommended that the Council work with Cambridgeshire County Council and other partners to create a case conference system to evaluate technical advice on flood mitigation on those most complex applications.**
- 5.27 A query was raised on whether the County Council has a mechanism to capture flooding related information so that the knowledge of individual officers is not relied on. Mrs Ellis confirmed that the County Council does collate information and that it is shared amongst partners.

Policy

- 5.28 The County Council will be reviewing the Local Flood Risk Management Strategy. The District Council will be consulted as part of this process.
- 5.29 During the flooding Anglian Water had to be flexible and were operating double the normal number of tankers. To do this it had to divert vehicles from transporting biosolids. This in turn required the agreement of the Environment Agency as it had public health implications. Anglian Water made the point that it deals with foul sewerage while other organisations are responsible for other water. There is, therefore, a requirement for joint working on water management. Given the public health context, there is a common need for understanding amongst the authorities of who does what and who meets the costs. **It is recommended that partners will collaborate on the development of a joint drainage and waste water management plan.**

6. RECOMMENDATIONS

- 6.1 In summary, it is RECOMMENDED that
- a) **links to flooding advice are publicised through the District Council's own communication channels and forwarded to all Town and Parish Councils;**
 - b) **the Council works with the County Council to support the establishment and running of local flood groups as a means to develop community resilience against future flooding and as an important additional source of information for forecasting flooding;**
 - c) **a study be undertaken by a group of technical experts to understand fully the causes of floods linked to climate change, to look at the issue of cumulative impacts and to make a series of recommendations to feed into the next SPD document review, ensuring the refreshed document responds to changing realities and technology;**

- d) **the Council work with Cambridgeshire County Council and other partners to create a case conference system to evaluate technical advice on flood mitigation on those most complex applications;**
- e) **to collaborate with partners on the development of a joint drainage and waste water management plan, and**
- f) **that the Council support the County Council in its project to map local water courses and call for this mapping activity to begin with Huntingdonshire.**

7. BACKGROUND PAPERS

Notes of meetings of the Flooding Task and Finish Group.

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