



## **REPORT OF THE CORPORATE DIRECTOR, PLACE**

### **FLOOD RISK MANAGEMENT SECTION 19 REPORTS**

#### **Purpose of the Report**

1. This report sets out the County Council's duties as the Lead Local Flood Authority to report on flooding incidents under Section 19 of the Flood and Water Management Act 2010 and contains individual Section 19 reports in relation to flooding in February 2020, for Members' approval and endorsement.

#### **Information**

2. Following the severe flooding in many parts of the country during the summer of 2007, the Government commissioned an independent review (the 'Pitt Review') which in 2008 recommended that local authorities should lead on the management of local flood risk, working in partnership with other organisations. Two key pieces of legislation have brought this forward; the Flood Risk Regulations 2009 which transposed the EU Floods Directive into UK Law and the Flood and Water Management Act 2010.
3. Nottinghamshire County Council (NCC) is a Lead Local Flood Authority (LLFA) and has powers and statutory duties to manage and co-ordinate local flood risk management activities. Nottinghamshire County Council does this by working together with other organisations including the Environment Agency (EA), who manage flooding from generally larger rivers known as Main Rivers, such as the River Trent; The Trent Valley Internal Drainage Board (TVIDB) managing low lying areas; District, Borough, Parish and Town Councils; and infrastructure/ utility providers, such as Severn Trent Water (STW) and Highways England (HE).
4. This partnership work is overseen by the Strategic Flood Risk Management Board, jointly chaired by Nottinghamshire County Council and Nottingham City Council (NCiC) and attended by all Risk Management Authorities (RMAs).
5. Local flood risk means flooding from surface water (overland runoff), groundwater and smaller watercourses (known as Ordinary Watercourses).
6. Section 19 of the Flood and Water Management Act gives Nottinghamshire County Council as a Lead Local Flood Authority, the following duties:
  1. On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate:

- (a) Which Risk Management Authorities (RMAs) have relevant flood risk management functions.
- (b) Whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.

2. Where an authority carries out the above investigation it must:-

- (a) Publish the results of its investigation.
- (b) Notify any relevant RMAs.

- 7. It should be noted that the purpose of a Section 19 Report is to outline what happened during a flooding incident and whether the relevant Risk Management Authorities have exercised or will exercise their responsibilities - it does not identify specific measures to prevent future flooding. It is up to the Lead Local Flood Authority and other Risk Management Authorities if they wish to then carry out further investigation into possible flood prevention and protection measures that could be implemented.
- 8. At Transport and Highways Committee on 31 October 2013 it was resolved that Section 19 Reports should be undertaken where the Authority is aware that five or more properties in a locality have been affected by internal flooding (over the threshold [doorstep level] of the property).

### **Section 19 Report Summary**

- 9. Over the weekend of the 15th and 16th of February 2020 Storm Dennis hit parts of Nottinghamshire with 34mm (an average month's worth) of rain falling in 48 hours. Across the UK a record 594 flood warnings and alerts were in place over the weekend with 38 flood warnings and 16 flood alerts across Nottinghamshire.
- 10. Storm Dennis followed Storm Ciara which had hit the week before bringing heavy rain and winds of over 90mph resulting in more than 220 flood warnings and alerts in place across England. Trees were toppled, buildings were damaged and homes had to be evacuated as rivers burst their banks. Nationally thousands of people were left without electricity and sporting events were cancelled due to the weather. Airlines cancelled hundreds of flights, while several rail firms urged passengers not to travel.
- 11. Both storm events followed some 6 months of persistent and often heavy rainfall across the UK. During Storm Dennis, Via East Midlands Ltd. (on behalf of Nottinghamshire County Council) facilitated 51 road closures, placed over 70 flood signs on the network to warn motorists and delivered over 4000 sandbags. Storm Dennis is believed to have caused the worst winter floods of recent times, in part because the rain was so widespread but also because it fell on ground already saturated by Storm Ciara the previous week. Colleagues in Emergency Planning activated emergency procedures and supported the communities of Nottinghamshire during the event.
- 12. Storm Dennis triggered a record-breaking number of Environment Agency flood warnings and alerts in England on Sunday 16<sup>th</sup> February 2020 as the rain continued to fall over the weekend.
- 13. We estimate 67,000 people were adversely affected by the flooding in February within the 29 communities that reported flooding incidents, with over 200 reports of internal flooding. Consequently, ten Section 19 Reports have been triggered. These are contained in the attached appendices and relate to the communities of:

Appendix	Place	Page Numbers	Lead Risk Management Authority
A	Cotgrave	01-06	Nottinghamshire County Council
B	Bingham	07-11	Network Rail
C	Cropwell Butler	12-17	Nottinghamshire County Council
D	Gotham	18-24	Severn Trent Water
E	Tollerton	25-31	Nottinghamshire County Council
F	Radcliffe on Trent	32-46	Nottinghamshire County Council
G	Sutton Bonnington	47-52	Nottinghamshire County Council
H	Lowdham	53-61	The Environment Agency
I	Trowell	62-67	The Environment Agency
J	Woodborough	68-72	The Environment Agency
K	East Markham	73-78	Nottinghamshire County Council (November 2019 event)

14. East Markham is included in this report as an additional community to the ten previously reported to Committee in March 2020 that unfortunately flooded in November 2019.
15. At 07:00 on Sunday 16<sup>th</sup> February a major incident was declared by the Tactical Coordinating Group (TCG). A process of evacuation commenced for the residents of Lowdham and a rest centre was opened at Bingham. In many of the areas impacted by the flooding it was exacerbated due to run off from surrounding fields; this impact was worsened due to the saturation of ground following the prolonged period of rainfall. Indeed, in many instances across the County during this period, areas that were normally permeable were behaving as almost impermeable due to ground saturation.
16. Nottinghamshire County Council reopened its hardship fund, making available £120 per household and £300 per business for all those affected by flooding in the County. Rushcliffe Borough Council followed suit, making available a Flood Hardship Fund of £500 per household. A £2,500 Business Grant administered by Nottinghamshire County Council on behalf of the Ministry of Housing, Communities and Local Government was reactivated and a Property Flood Resilience Recovery Grant of £5000 was made available from the Department for Environment, Food and Rural Affairs, which was administered by Rushcliffe Borough Council and Newark and Sherwood District Council.
17. **Cotgrave**, is a town in the south of the county with a population of approximately 7200 at the 2011 Census. On Sunday 16<sup>th</sup> February 2020, 12 properties on Hickling Way, Fosse Walk, Marlwood and Owthorpe Road suffered internal flooding. Properties on Hickling Way, Fosse Walk and Marlwood that flooded reported water entering from the rear of the properties. These properties back onto a steep embankment adjacent to fields. Following extended periods of rainfall surface water flows from the surrounding fields were unable to soak into the ground and therefore flowed towards the lowest points. Water then flowed down the embankment and into the properties below before dispersing into the highway drainage infrastructure at the front of the properties. The 5 properties on Owthorpe Road that flooded also had water entering at the rear of the properties. The properties back onto adjacent fields and are set lower than the surrounding area.
18. **Bingham** is a market town with a population of approximately 9100 at the 2011 Census. On 16<sup>th</sup> February 2020 following the prolonged period of heavy rainfall, 10 properties on Western Avenue in Bingham suffered internal flooding. The area affected sits adjacent to an existing watercourse on land owned by Network Rail. The prolonged rainfall led to this watercourse being overwhelmed and resulted in the flooding of properties. Subsequent investigations have

identified that Network Rail should consider maintenance work on the section of watercourse to reduce the risk of further flooding incidents. Additional surface water is understood to have flowed into Western Avenue from the recreation ground due to a blocked grill on an unnamed watercourse which runs at the back of the grounds. This is believed to have exacerbated the flooding from the front of the properties where they had already suffered internal property flooding from the watercourse at the rear.

19. **Cropwell Butler** is a small rural village located in the south of the county with a population of approximately 600 at the 2011 Census. 15 properties in total on Hardigate Road, Main Street and Back Lane in Cropwell Butler suffered internal flooding. Cropwell Butler is surrounded by agricultural land and served by a network of unnamed watercourses that collect surface water and highway water from the catchment. These converge in the centre of the village and ultimately discharge to the west via a culvert that runs under the Village Hall on Main Street. There were three key areas of flooding in the village, Hardigate Road, Back Lane and Main Street. 5 properties on Hardigate Road reported that the water entered from the rear of the properties, and 3 properties on Back Lane which sit in a natural low spot and 7 properties on Main Street flooded from the front with additional flooding being suffered due to bow waves from vehicles driving through the flood waters on the road.
20. **Gotham** is a village in Nottinghamshire with a population of approximately 1600 recorded in the 2011 Census. Parts of Gotham suffered a significant flood event with 8 reported incidents of internal property flooding, combined with the flooding of many more gardens, curtilages and the public highway. The flooding that occurred in Gotham on 16th February came from two sources; each impacting separate areas: surface water which affected 1 property on Leake Road, 1 on The Square and 2 on Nottingham Road; and foul sewage affecting 1 property on Gilbert Avenue, 1 on Holland Close, 1 on Wallace Street and 1 on St Andrew's Close. Gotham has historical flood issues with recent incidents in 2012, 2016 and 2019. The 2016 and 2019 events were severe enough to warrant Section 19 reports which have been published. Following the 2019 and 2020 events Nottinghamshire County Council have carried out significant amounts of work to survey existing drainage identified as defective, clear and repair damaged culverts and encourage land owners to replace damaged and insufficient culverts and clear watercourses. Severn Trent Water have carried out extensive preventative measures and investigation work in Gotham and their tankers have been operating constantly to assist a system running at near full capacity. They have also been liaising closely with residents directly affected, implementing preventative work within properties where it has been identified as beneficial.
21. **Tollerton** is a village with a population of approximately 1900 at the 2011 Census. Tollerton suffered a significant flood event with 14 reported incidents of internal property flooding. The flooding also affected a number of gardens, curtilages and the public highways in the village to the extent that Tollerton Lane and Cotgrave Lane were closed due to the severity of the flooding. During the rainfall all the surface water assets were overwhelmed resulting in flooding of properties. The flooding experienced replicated the events of November 2019. As part of NCC's proactive response to the flooding in November investigations into the surface water assets in the area affected were on site when the February event occurred. These investigations were completed in April and an action plan has been developed that recommends short and medium term proposals to reduce the risk and consequences of repeat incidents.
22. **Radcliffe on Trent** is a large village with a population of approximately 8200 located on the south side of the River Trent. On 16th February 2020 parts of Radcliffe suffered a significant flood event with 36 reported incidents of internal property flooding. The flooding also affected

many gardens, curtilages and public highways in the area. In the very early hours around 2:30am on Sunday 16th Feb, Clumber Drive was subjected to flooding with 29 properties reporting internal flooding and at least 11 others suffering external flooding. Some residents had to be rehomed due to the severity of the flooding. St. Lawrence Boulevard had 4 properties internally affected, The Green had 3 properties internally flooded with several others narrowly escaping thanks to proactive measures taken by residents during the event, and one incident on Thomas Avenue was also reported. The flooding on Thomas Avenue was already being investigated prior to the event of 16<sup>th</sup> February and occurs where water gathers against an exterior wall of the property and seeps through the brickwork into the property.

23. **Sutton Bonnington** is a rural village with a population of approximately 2202 at the 2011 Census. On 16th February 2020 following the prolonged period of heavy rainfall, 5 properties on Pasture Lane suffered internal flooding. Event investigations have highlighted that a significant surface water route flows from fields to the north of the village under the railway line and then accumulates at the topographical low spot in the village. The area affected by flooding sits in the south west of the village where the surface water drainage serving the village discharges into a series of ditch systems. The quantity of prolonged rainfall led to the network of ditches becoming overwhelmed, resulting in internally flooded properties.
24. **Lowdham** village has a population of 3,334 at the 2011 census. Lowdham has a significant history of flooding with recently recorded events, in 1999 where 300 properties were flooded, 2007, 2012, 2013 and 2019; a number of which have been the subject of previous Section 19 reports. During the morning of 16th February Lowdham was subjected to a significant amount of rainfall with 39.2mm of rain recorded as falling over a 24-hour period at the nearby Lambley rain gauge. The Lowdham Grange river gauge recorded its highest ever level of 1.54m at peak. This led to parts of Lowdham suffering from a significant flood event with 93 reported incidents of internal property flooding. The flooding that occurred in Lowdham on the 16th of February came from a mixture of sources; river flooding from the Cocker Beck over-topping, and flooding from surface water; the combination of both resulting in widespread flooding of properties, roads and open spaces across the catchment.
25. **Trowell** is a large village located with a population of approximately 2400 at the 2011 Census. On 16th February 2020 following the prolonged period of heavy rainfall, 6 properties on Cranbourne Close in Trowell suffered internal flooding. The area affected sits within Flood Zone 2 and 3 adjacent to an existing watercourse, ownership of which is split between a number of riparian landowners. The sheer amount of rainfall falling during this event and entering the watercourse led to this watercourse being overwhelmed and resulted in the flooding of properties.
26. **Woodborough** is a village with a population of approximately 1800 at the 2011 Census. On 16th February 2020 following the prolonged period of heavy rainfall, 9 properties on Main Street suffered internal flooding. Reports from the residents were that the water entered from both the rear and front of the properties. Due to the centralised village watercourse overtopping on Main Street, combined with the large amount of surface water that fell, this then resulted in flood water flowing into properties. During normal rainfall conditions the watercourse on Main Street is able to manage the drainage sufficiently, during this event however the capacity of the network was exceeded.
27. **East Markham** experienced flooding on 7th November 2019, when parts of the East Midlands experienced a month's worth of rainfall in just 24 hours. It was reported by the Environment Agency that Nottinghamshire experienced 225% of its average monthly rainfall between the

7th and 14th November. A major incident was declared at 09:50 on Thursday 7th November by the Tactical Co-ordinating Group. With the ground already saturated following one of the wettest autumns on record, East Markham, being a small village located in north Nottinghamshire with a population of 1160 at the 2011 Census, suffered 5 reported incidents of internal property flooding comprising 4 reported incidents on York Street and 1 reported internal flooding on Great Lane.

28. The flooding experienced by these communities has been devastating with many home and business owners being unable to return to their properties. For many months to come the catastrophic impacts of this flooding will be felt by the communities as they begin the task of dealing with the impacts of the flooding on their lives and well-being.
29. Officers from the Flood Risk Management Team joined forces with other agencies to provide much needed support to the affected communities and initiated investigations into the numerous flooding events and associated mechanisms. Supporting the multi-agency recovery, initial visits by the Flood Risk Management team to sites around the county recorded internal flooding at over 200 properties.
30. The attached Section 19 reports identify that all relevant Risk Management Authorities carried out and continue to carry out their respective duties.

### **Flooding Update June 2020**

31. The Met Office issued a yellow weather warning for thunderstorms and heavy rain on Wednesday (17 June). Torrential downpours ensued around teatime which resulted in localised flooding with around 30mm of rain landing in less than an hour. The majority of the internal flooding to residential and business premises was caused by the pluvial flash flood, no reports of river flooding were received. NCC responded immediately with the reactivation of the Disaster Recovery Grant payment of £300 per business and £120 per residential property. To date we have the following numbers confirmed as internally flooding between Sunday 14<sup>th</sup> June and Thursday 18<sup>th</sup> June.

▪ Beeston/Chilwell	-	34 Businesses 56 Residential
▪ Ruddington	-	21 Businesses
▪ Kirkby in Ashfield	-	3 Residential
▪ Worksop	-	3 Residential
▪ East Markham	-	1 Residential

32. A significant issue which made the difference between properties being flooded or not in Beeston and Ruddington were bow-waves caused by traffic driving quickly through flood waters this combined with initial investigations would suggest the cause of the flooding to be pluvial. The ability of the infrastructure to accommodate the torrential rain was clearly beaten on this occasion. Section 19 Reports will be required for Beeston and Ruddington and will be brought to Communities and Place Committee. It is recognised that flooding can have a devastating impact on businesses and this coupled with the impact of Covid 19 will be a significant challenge. The County Council will work with partners to consider what flood alleviation options are available going forward.

### **Summary of Actions.**

33. Following the flooding in November and more recently in February several actions were identified as part of the Section 19 process for affected Risk Management Authorities.

34. The County Council has continued to provide support to residents affected by the flooding through drop in sessions; direct contact channels; site visits to provide direct advice; and continuing with investigations into the November events. The County Council has undertaken exploratory work on the conditions of existing drainage networks and will endeavour to ensure they are operating to their optimal capacity and where necessary will provide advice and suggestions to responsible landowners to support this.
35. As part of the future actions the County Council will continue to lead on investigations in areas for which they are the lead Risk Management Authority in order to better understand the mechanisms for flooding. Support will continue to be provided for affected residents and advice for landowners dealing with riparian ownership issues. Funding channels and options will be explored as part of analysing potential hydraulic modelling and capital investment schemes. Further investigations into these events may identify additional actions. The Council will continue to work in partnership with other key Risk Management Authorities.
36. The Environment Agency are the lead Risk Management Authority for Lowdham, Trowell, and Woodborough and will lead on further investigations into the incidents and consider options for reducing the risk of future flooding incidents. This will incorporate hydraulic modelling and scheme design to improve things in the catchments. They will also review their current maintenance schedules and their communication and engagements plans to ensure there is adequate risk mitigation taking place.
37. The Trent Valley Internal Drainage Board will continue to maintain their watercourses and will continue to liaise with affected communities. The Drainage Board will review ways of improving the operation of specific watercourses and their interactions with additional water courses and the risk of flooding.
38. Severn Trent Water will continue to maintain their assets and work with other agencies to support local communities.
39. Rushcliffe Borough Council and Newark and Sherwood District Council will support investigations and reviews into emergency procedures alongside Nottinghamshire County Council Emergency Planning to ensure their validity for potential future events.

### **Reason/s for Recommendation/s**

40. The report delivers a duty defined within the Flood and Water Management Act 2010 and in line with approved County Council Policy.

### **Statutory and Policy Implications**

41. The County Council has a number of statutory duties and powers under the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009 including preparation of Section 19 Reports.
42. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance, finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

## **Financial Implications**

43. Since becoming a Lead Local Flood Authority, The Nottinghamshire County Council has worked in collaboration with colleagues, risk management authorities, partners and local communities to help reduce the risk of flooding in Nottinghamshire.

## **Implications for Sustainability and the Environment**

44. It is anticipated that this collaborative work will ultimately result in the delivery of sustainable projects that reduce flood risk across the county whilst also reducing the negative impacts that flooding has on the environment.

## **RECOMMENDATION/S**

It is recommended that:

- 1) Committee approves the publishing of the Section 19 report Appendices A-K in accordance with Section 19 of the Flood and Water Management Act 2010 and our Lead Local Flood Authority responsibilities.
- 2) The Committee endorses the work outlined in the report.
- 3) Committee encourages all agencies involved to seek and implement suitable measures to alleviate flooding as soon as reasonably possible.
- 4) The capital funding programme for flood protection be included in the regular 6 month flooding update report to Communities and Place Committee in October.
- 5) That officers provide updates to Committee on all relevant agencies' progress with alleviation measures as part of the regular Flood Risk Management updates.

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**Corporate Director, Place**

### **For any enquiries about this report please contact:**

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## **Constitutional Comments (SJE 05/06/2020)**

45. This decision falls within the Terms of Reference of the Communities & Place Committee to whom responsibility for the exercise of the Authority's functions relating to flood risk management scrutiny has been delegated.

## **Financial Comments (RWK 02/06/2020)**

35. There are no specific financial implications arising directly from this report.

## **Background Papers and Published Documents**



Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

- None

**Electoral Division(s) and Member(s) Affected**

- All