



Sponsor: Strategic Director for Communities & Place

Author: Acting Team Leader Drainage and Flood Risk Management

November 2019 Derwent Flood Investigation Report

Purpose

- 1.1 Section 19 of the Flood and Water Management Act 2010 (the Act) requires Derby City Council as the Lead Local Flood Authority (LLFA) for Derby to investigate to the extent it considers necessary or appropriate a flood event in the city.
- 1.2 This legislation also requires the Council to publish the results of its investigation.
- 1.3 The flood event on 8th November 2019 triggered the locally set criteria for requiring an investigation under Section 19 of the Act and therefore a flood investigation had been carried out and a flood investigation report produced.
- 1.4 This report seeks approval from Cabinet to publish the flood investigation report.

Recommendations

- 2.1 To approve the publication of the flood investigation report.
- 2.2 To note the contents of the report regarding the causes and impacts of the November 2019 flood.
- 2.3 To accept the recommended actions in Table 7-1 of the report with regards to managing future flood risk from the River Derwent

Reasons

- 3.1 To ensure Derby City Council complies with its statutory duty under the Flood and Water Management Act 2010.

Supporting information

- 4.1 Derby City Council has a responsibility as the LLFA under the Act to investigate flood events. This obligation is set out within Section 19 of the Act:

- 1) *On becoming aware of a flood in its area, a LLFA must, to the extent that it considers it necessary or appropriate, investigate –*
 - a) *which RMA's have relevant flood risk management functions, and*
 - b) *whether each of those RMA's have exercised, or is proposing to exercise, those functions in response to the flood.*
- 2) *Where an authority carries out an investigation under subsection (1) it must ---*
 - a) *publish the results of its investigation, and*
 - b) *notify any relevant RMA's.*

- 4.2 The thresholds for a formal investigation into a flood event are set locally and so can differ between different LLFAs. The pre-determined thresholds for a formal flood investigation for Derby are as follows.
- 1) *Number of properties internally flooded – An event where records or anecdotal evidence shows that five or more residential properties, or two or more non-residential properties (industrial/commercial) affecting employment, have been internally flooded within close proximity.*
 - 2) *Critical infrastructure impacted by the flood – An event which leads to protracted impact on a key utility service (water, sewage treatment, electricity distribution, gas distribution, telecommunications, rail network, strategic road network) in excess of twelve hours before restoration of the service.*
- 4.3 A separate flood investigation report for the same flood event has been produced by Derbyshire County Council covering the flooding upstream of Derby, outside of the Council's administrative boundary.
- 4.4 The report covers flooding at twelve different sites across Derby that were affected by flooding from the River Derwent on 8th-9th November 2019. Although individually not all the sites meet the thresholds set out above, because all twelve sites were impacted because of the same flood event they have been considered as a whole. Therefore, a formal flood investigation has been triggered.
- 4.5 The recommendations identified in the flood investigation report are aligned with the objectives of the Derby City Local Flood Risk Management Strategy, which was implemented in 2017:
- Improve our knowledge of existing Flood Risk Management Assets
 - Develop economical, risk-based flood risk management schemes and infrastructure maintenance regimes that form a sustainable approach to reducing flood risk
 - Educate and engage with communities and elected Derby City Council members to raise awareness of flood risk
 - Minimise the risk of flooding from new developments, avoiding development that puts more people at risk of flooding
 - Promote flood risk management activities that consider climate change, enhance the natural environment, conserve and enhance the historic environment, improve water quality and provide amenity benefits
 - Work in partnership with Risk Management Authorities and other key stakeholders to share a common understanding of flood risk
 - Promote riparian responsibilities for the maintenance of watercourses
- 4.6 The report and its recommendations were produced by an independent engineering consultancy firm, who were appointed to provide a thorough investigation into what was a very significant flood event. The peak river level on the Derwent on 8th November 2019 was the highest since recorded gauging of the Derwent began in 1935. The report states that the flood was likely to be a 75–95-year return period event (1.3% to 1.05% statistical chance of occurring in any given year).

- 4.7 The following actions have been recommended to the Council within the flood investigation report (note recommendations for other organisations are not included below. The full list is contained within Section 7.6 of the report):
1. Community Engagement to raise awareness of flood risk.
 2. Consideration of installation of a non-return valve on the highway drainage outfall into the ditch and other flood mitigation measures (A61 Pektron).
 3. Investigation of the watercourses and ditches within this area to gain a better understanding of the network; how they connect, where they outfall etc. (A61 Pektron)
 4. Regular inspection and maintenance of the flood defences. Reinstalling missing coping on flood wall along riverbank (Exeter Place).
 5. Explore with planning whether a standard response can be created from the LLFA objecting to any change of use to a more vulnerable use and any development that will lead to a large number of the general public gathering, i.e. entertainment venues. (Meadow Lane).
 6. Consideration and investigation of the use of non-return valves, pumping station etc. on surface water network outfall behind Chaddesden Sidings to prevent backing up of fluvial flows and allow flows to be discharged from the surface water drainage network (Derwent Parade surface water drainage outfall).
 7. Investigation into the railway culvert to understand what purpose the culvert currently serves related to drainage catchment and function (Chaddesden Sidings).
 8. Routine inspection and regular maintenance of the ditch to ensure that it does not become blocked or silted up. Explore installation of upstream storage features to mitigate the risk of pluvial flooding when the river levels are high (Raynesway).

4.8 **Delivery**

The recommended actions above align with our local flood strategy and inform our asset management plans. Where appropriate, they will form part of our on-going Highways & Transport/Flood Defence capital programme. We will work closely with the Environment Agency, Severn Trent Water and other key stakeholders on those actions which require further exploration, to establish and assess the opportunities for future schemes, including resourcing.

4.9 Monitoring progress

There is no formal requirement under the Act to report progress on recommendations identified within the flood investigation report, or even to identify recommendations in the report. However, as a Council we wish to alleviate flood risk where possible options have been identified so we will take steps to implement the actions contained within Section 7.6 of the report (page 44) promptly.

Any actions that require capital investment will be included on the Highways and Transportation and/or Flood Defence capital programmes which are reported through Cabinet.

Officers will also provide a written update on the progress on the recommended actions within the flood investigation report within one year from publication of the report.

Public/stakeholder engagement

- 5.1 A draft report has been circulated with partner Risk Management Authorities (RMAs) as required by the legislation, with an opportunity provided to recommend amendments to the report. Only minor suggestions were received from any RMAs which were accepted. However, it has not been published as draft or otherwise prior to this Cabinet report.

Other options

- 6.1 There is an obligation on the Council to publish the result of the investigation into this flood event. There is no obligation for this particular report into the event to be published. However, if Cabinet resolved to not publish the current report, the Council would need to produce a different report, consult with partner RMAs again and publish that report. This would result in delay and further cost to the Authority together and would bring little or no benefits.

Financial and value for money issues

- 7.1 Recommended actions 2, 3, 6, 7 and 8 above in Section 4.7 may form the basis of future projects to manage flood risk in the city. Any works arising would be subject to our prioritisation process for inclusion in future year's capital programmes, as appropriate, subject to Cabinet approval.
- 7.2 Recommended actions 1 and 4 from Section 4.7 above are already in progress or substantively complete so are unlikely to have significant cost implications.

Legal implications

- 8.1 A flood investigation report must be published for this event under the requirements of the Flood and Water Management Act 2010 and the supplementary criteria for a significant flood event set by the Derbyshire Local Resilience Forum. Recommendation 2.1 of this report addresses that obligation.

Climate implications

- 9.1 There are no carbon implications connected to publication of the flood investigation report. Managing flood risk is a key challenge connected to the Climate Emergency and the flood investigation report plays a part in achieving that.

Socio-Economic implications

- 10.1 There are no socio-economic implications that arise directly from the publication of this flood investigation report. More generally, increasing our understanding of flood risk and working with partners to deliver evidence-based schemes, will strengthen our overall social and environmental resilience as a city.

Other significant implications

- 11.1 None.

This report has been approved by the following people:

Role	Name	Date of sign-off
Legal	Olu Idowu, Head of Legal Services	21 October 2022
Finance	Alison Parkin, Director of Financial Services	26 October 2022
Service Director(s)	Verna Bayliss, Director of Planning, Transport & Engineering	21 October 2022
Report sponsor	Rachel North, Strategic Director of Communities & Place	22 October 2022
Other(s)	Lincoln Smithers, Head of Engineering	25 October 2022

Background papers:	Investigation Report into November 2019 Derwent Floods in Derby City
List of appendices:	