

# Policy Committee

08 July 2024



**Reading**  
Borough Council  
Working better with you

<b>Title</b>	January 2024 Flood Event
<b>Purpose of the report</b>	To note the report for information
<b>Report status</b>	Public report
<b>Report author</b>	Sam Shean
<b>Lead Councillor</b>	Cllr Karen Rowland, Lead Councillor for Environmental Services & Community Safety.
<b>Corporate priority</b>	Healthy Environment
<b>Recommendations</b>	<ol style="list-style-type: none"><li>1. That the Committee notes the outcome of the 'Section 19 Flood Report' following the Flood event in January 2024.</li><li>2. That the Committee notes the 'January 2024 Flood Event Options Report' and Lessons Learned findings.</li><li>3. That the Committee endorses the recommended actions set out in the 'January 2024 Flood Event Options Report' and that officers proceed to deliver these recommended flood reduction measures.</li></ol>

## 1. Executive Summary

- 1.1. The Council is the Lead Local Flood Authority (LLFA) as set out in the Flood & Water Management Act 2010 (FWMA) and has a duty to investigate and report all flood events findings using a Section 19 report.
- 1.2. Section 19 of the FWMA states that on becoming aware of a flood in their area, the LLFA must investigate (to the extent that it considers to be necessary or appropriate), which Flood Risk Management Authorities (RMAs) have relevant flood risk management functions and whether each RMA has exercised, or plans to exercise, those functions in response to the flood.
- 1.3. Schedule 2 of the FWMA amends other Acts and under the amended Section 14A of the Land Drainage Act 1991, LLFAs have the power to carry out works to manage flood risk from surface water runoff, groundwater and ordinary watercourses, where the work is desirable having regard to the 'Local Flood Risk Management Strategy'.
- 1.4. The Council responded to a flood event in January 2024 and this report sets out the response and actions taken by the Council, the options to reduce flooding, and the 'lessons learned' following a review of the incident.

## 2. Policy Context

- 2.2 The Council approved 'Investing in Reading's Future' our Corporate Plan. The Plan reflects the Council's priorities for Reading and provides direction for staff in delivering services to meet the needs of the communities within the Borough whilst working to a budget Medium-Term Financial Strategy (MTFS) to include to current Year-3 priorities.
- 2.3 To secure the most effective use of resources in the delivery of high quality, best value public service.

- 2.4 To make travel more secure, safe and comfortable for all users of the public highway.
- 2.5 To provide a public highway network as safe as reasonably practical having due regard to financial constraints and statutory duties.

### **3. The Proposal**

#### **Background to January 2024 Flood Event**

- 3.1. The Reading area was impacted by flooding in January 2024 arising from the River Thames, River Kennet and Holy Brook, and associated ditches and tributaries of these watercourses.
- 3.2. The main contributing factor to the flood event was above average rainfall levels in the three months prior to January 2024 (up to 150% above the long-term average), in combination with a period of intense rainfall in early January 2024 caused by Storm Henk.
- 3.3. Sixty-five percent of the total recorded rainfall for January 2024 in the Thames catchment (74mm) fell between 1<sup>st</sup> to 4<sup>th</sup> January, with 38% of the monthly total (28.4mm) falling within a 12-hour period between 15:00 hours on 4<sup>th</sup> January and 03:00 on 5<sup>th</sup> January, associated with Storm Henk. In the eight days prior to Storm Henk, 54.6mm of rainfall was recorded.
- 3.4. High rainfall levels on a saturated catchment led river levels at the River Thames at Reading gauge to rise to their highest recorded level since the major flood event of 1947. The river level rose above flood warning trigger levels 7.25m Above Ordnance Datum (AOD) on 5<sup>th</sup> January 2024, peaking at 7.54m AOD at 15:45 on 7<sup>th</sup> January 2024, and returning to a level within its 'typical range' of below 7.00m AOD on 11<sup>th</sup> January.
- 3.5. During the period commencing 6<sup>th</sup> January 2024 for 6 days the main river and ordinary watercourses capacity was exceeded from Natural Flood, saturated ground conditions and extreme prolonged rainfall, resulting in Low-lying land and property being flooded within the RBC administrative boundary with 21 residential properties, three commercial properties, including one static caravan being flooded internally, due to rising water levels in the River Thames, River Kennet and tributaries.
- 3.6. Of the flooded properties reported to the Council, 10 residential properties were impacted internally by flooding from the Christchurch Ditch, (known locally as the Gos Brook or Dannalls Brook), 4 residential properties from the Holy Brook which was exacerbated by localised surface water drainage problems and a further 4 residential properties from the River Thames including 2 properties at The Warren, Caversham.
- 3.7. It was noted that a private (RBC) electrical supply cable running through Christchurch Meadows had reached its end of life and failed during the flooding event, resulting in numerous streetlight outages within the Meadows including the ornamental lighting of Christchurch Footbridge. The subsequent high groundwater table levels restricted access to replace the cable until safe working condition were achievable in early June and the new cable installed and the power supply reinstated.
- 3.8. The Council commissioned Stantec to investigate and produce the Flood Option Report, (Appendix 1 'Reading Flood Investigation - January 2024' refers).
- 3.9. For background information please refer to Appendix 1, which sets out the following:
  - Relevant Watercourses and Responsibilities (Section 2.1), including the Council as Lead Local Flood Authority, the Environment Agency and Thames Water.
  - Fluvial Flood History (Section 2.2)
  - Flood Defences and Controls (section 2.3)
  - Antecedent Rainfall (Section 2.4)

- Surface Water – Runoff from Catchment (Section 2.5)
- Groundwater Levels (Section 206)

### **Actions by the Council at the time of the flooding event**

- 3.10. The Council and the Emergency Services activated the 'Tactical Co-ordinating Group' (TCG) on 4<sup>th</sup> January 2024 and a decision to declare a 'Major Incident' was made on the morning of the 5<sup>th</sup> June 2024.
- 3.11. Regular updated flood information was provided by the Environment Agency via their flood maps: [Live flood map - Check for flooding - GOV.UK \(check-for-flooding.service.gov.uk\)](https://www.gov.uk/check-for-flooding).
- 3.12. Public Health, Social Services and Education Departments activated their vulnerable person action plans to be on standby for evacuation should it be required.
- 3.13. The Council deployed staff to Circuit Lane / Sylvan Walk in Southcote and to Queens Road in Caversham to deliver sandbags and visited reported flooding sites along the Thames River including Scours Lane.
- 3.14. The Council set up a 'Storm Henk Recovery Group' on the 11<sup>th</sup> January 2024 to establish the extent of flooding, facilitate recovery and engagement with other agencies, support residents affected by the flood event, review operational procedures and the Council's response, provide information to the 'Local Resilience Forum' and key stakeholders, and to also carry out a 'Lessons Learned' investigation.
- 3.15. Meetings with affected residents of Queens Road & Mill Green Caversham, and Circuit Lane / Sylvan Walk Southcote, took place on 2<sup>nd</sup> February 2024 and attended by residents, representatives of Reading Borough Council, Stantec and the Environment Agency. Residents were invited to share their local knowledge and experience with the Council to inform the Flooding Investigation Report process and their anonymised responses are included in Flood Report (Appendix 1).
- 3.16. The Council commissioned ditch clearance works to the Christchurch Ditch (Gos Brook/ Dannalls ditch) and on the ditch immediately South of Circuit Lane, as well as repairs to the Kennet bank that was damaged / eroded by floodwater. The Council also installed a temporary clay bund under Briscoe's Bridge to hold back flood water from Circuit Lane area in the period after the flooding event.
- 3.17. The Council also engaged with Heron Island Residents Group, Network Rail, the Canal & River Trust and the Environment Agency to share information and to address watercourse ditch maintenance.

### **Recommended Actions following the January 2024 Flood Event Options Report**

#### **3.17 Lower Caversham area:**

- The Council are to carry out CCTV survey of the closed section of Christchurch Ditch from the footbridge at the eastern end of Hills Meadow to the Heron Island outfall point, to investigate its state of repair and capacity (under Heron Island private ownership). *Post report note: permission to carry out this survey is now in place.*
- Review if there is any requirement for localised repairs to the footbridge at the eastern end of Hills Meadow and/or wingwalls following removal of the tree and review the need for localised repairs to damaged banks.
- Installation of a trash screen to the culvert at the eastern end of Hills Meadow, to capture debris before it enters the closed section of the culvert and improve the ease of future clearance works.
- Establishment of a checking/maintenance schedule for the ditch and trash screen.

- Installation of a level gauge board at the eastern end of Christchurch Ditch to provide a visual indicator of water levels and potential flood risk to residents.
- After the water levels in Christchurch Ditch had returned to normal post-flood levels, local residents noted some fallen blocks in the ditch close to the footbridge at the eastern end. This should be reviewed, and repair works carried out as necessary.

### 3.18 **Southcote / Kennet Meadows area:**

- Investigate the potential for permanent raising of the access road level under Briscoe's Bridge. This could potentially be achieved by installing a full-width speed bump with the top-level set at the flood level for a 1 in 2-year return period. This would prevent backflow of water in the floodplain south of the railway bridge towards Circuit Lane, and the temporary clay bund which has been installed has already been established to be effective in reducing backflows. The most appropriate method of ground-raising will need to be discussed and agreed with all stakeholders.
- Further bank and footpath works to the Holy Brook and associated ditches will require consultation with and consent from the EA.
- Further investigation of requirements for ditch and culvert clearance, in consultation with relevant landowners, and providing reminders to riparian owners of their repair and maintenance responsibilities.
- Discussion of the removal of sheet piling from the culvert south of Circuit Lane with the landowner and suitable replacement material, to re-establish flow through the culvert to the designed levels.
- Establishment of a checking/maintenance schedule for the ditch network connected to the Holy Brook.
- Installation of a level gauge in the Holy Brook to provide a visual indicator of water levels and potential flood risk to residents.
- Continue to explore the potential for 're-wetting' Kennet Meadows to deliver multi-functional benefits for biodiversity, flood risk management, public access and other benefits.

### 3.19 **Scours Lane:**

- Limited information is available about the flooding of park homes at Scours Lane during the January 2024 flood event and any longer-term impacts. Further advice could be provided about temporary flood protection measures for the site to be implemented when flood warnings are issued, if required.

### 3.20 **RBC Administrative Actions:**

- Review website to make information about flooding easier to find, in particular what to do and who to contact when residents are impacted by or concerned about flooding.
- Review the Council's 'Sandbag Policy'.
- To engage the University of Reading to jointly prepare a 'Communication Plan' to better inform the public of what the Council can offer during a flood event and to help inform and educate private property owners of their responsibility to protect their property if located within a flood plain and vulnerable to future flooding events.
- Review the Flood Action Plan for Council owned properties.

### 3.21 **Environment Agency – Administrative Actions:**

- Review the text/email/phone call flood alert system in the Thames/Lower Caversham area to ensure that all roads adjacent to and north of Christchurch Ditch

are included in any relevant River Thames flood alert messages for the areas both upstream and downstream of Caversham Lock.

- Provide an update on the alternate proposals announced following the withdraw of the Lower Caversham Flood Alleviation Scheme.

#### **Next Steps:**

- 3.22. Recommendations for further actions, which are subject to landowner consent, include surveys to identify the need for further ditch and channel clearance works, installation of water level gauges to Christchurch Ditch and the Holy Brook, installation of a trash screen to Christchurch Ditch, removal of existing sheet piling works and replacement with a suitable alternative, and establishment of a checking and maintenance schedule for ditches within RBC ownership. Consideration of these actions will be taken forward by RBC, and other RMAs as required.

#### **Lessons Learned:**

- 3.23. The Council has carried out a 'Lessons Learned' exercise as part of the 'Storm Henk Recovery Group', to learn from the event and to put measures in place to better respond to the next flood event. Although the affected properties all sit within flood plain areas, there are valuable 'lessons learned' to deal with a re-occurrence of the flooding event experienced during the January 2024 flood, particularly with Climate Change having an increasing impact over time; the Council needs to ensure that:
- It can respond in a timely manner.
  - Activate specific action plans for each of these vulnerable areas.
  - Affected residents to be made aware of the flood response action plans.
  - Residents are provided with a clear route to contact the Council should assistance be required.
  - That cyclical inspections and maintenance regimes are carried out on the watercourse ditches and recorded.
  - That flood action plans are stored on a centrally accessible SharePoint site that all Emergency Response teams can access when required.
  - That an annual review and update of the response plans is completed, and new data and information added and or amended accordingly.

## **4 Contribution to Strategic Aims**

- 4.1 Reading Borough Council's vision is to:
- To help Reading realise its potential – and to ensure that everyone who lives and works here can share the benefits of its success.
- 4.2 The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:
- Healthy Environment
  - Thriving Communities
  - Inclusive Economy
- 4.3 These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:
- People first
  - Digital transformation
  - Building self-reliance

- Getting the best value
  - Collaborating with others
- 4.4 Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the Council's website - [Corporate plan - Reading Borough Council](#). These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.
- 4.5 The recommended actions set out in section 3.17 to 3.23 will contribute to the Council's Strategic Aims of providing a safe and healthy environment for all residents by reducing the flood risk as far as reasonably practicable while taking due regard to climate change and the location of vulnerable properties.

## **5 Environmental and Climate Implications**

- 5.1 The Council declared a Climate Emergency at its meeting on 26<sup>th</sup> February 2019 (Minute 48 refers).
- 5.2 A Climate Impact Assessment has been completed which suggests a 'net medium positive' impact arising from proposed works to reduce the risk of flooding to protect properties within the flood plain.
- 5.3 Contractors will be required to submit an Environmental Implications proposal which will form part of the quality element of the tender evaluation. A social value quality submission will also be included to ensure that the most deprived Wards in Reading benefit.
- 5.4 Contractors will be required to submit Carbon reduction and improved sustainability targets. The intent is to reduce the amount of carbon used to produce the materials at source, using recycled materials, lower temperature materials, reducing the uncontrolled waste in the environment to reduce pollution of the natural environment, use of electric vehicles and plant, use of cold applied materials with lower carbon emission, as well as how they will achieve their carbon reduction targets.
- 5.5 The Council is committed to a tree planting programme to increase canopy cover, improve biodiversity and reduce localised flooding. The Council is committing up to 1% of the value of the highway capital programmes towards this initiative.
- 5.6 The Reading Climate Emergency Strategy, which was endorsed by the Council in November 2020, highlights the importance of adapting to climate impacts as well as reducing the emissions which are driving climate change. The Council will regularly review design standards, in conjunction with industry bodies, to take into account the extreme weather events (both extreme heat and extreme cold) to ensure sustainability of the public highway network.

## **6 Community Engagement**

- 6.1 The public can report flooding incidents to the Council via the Council's Web Page [Report a road or street problem - Reading Borough Council](#), the 'Love Clean Reading App', or by email [Highways@reading.gov.uk](mailto:Highways@reading.gov.uk). These include blocked road gullies, and drains, overgrown watercourses, flood defence assets, road and structures condition concerns, which are assessed, and repairs actioned. Proposed flood reduction schemes will be brought to Committee for consideration and approval should they meet the assessment criteria.
- 6.2 This report will be available on the Council's website following Housing Neighbourhoods and Leisure Committee approval processes.
- 6.3 Communities and properties that are potentially vulnerable to fluvial (river) flooding can sign-up to receive Flood Alerts/Warnings from the Environment Agency which the Council's Emergency Planning Team will assist residents with.

6.4 The Council's Emergency Planning Team are committed to working with local community groups to establish Flood Warden Schemes and Flood Plans.

## **7 Equality Implications**

7.1 Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:

- eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
- advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
- foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

7.2 The Flood Reduction and Maintenance programmes consists of improvement work to the Council's existing public highway network and watercourses that the Council are responsible for and will be making improvements to existing highway assets. There is no overall change to service delivery at this time and all users will have a safe public highway environment. Should any future updates/amendments be required, which result in service delivery changes, an equality impact assessment will be carried out.

## **8 Other Relevant Considerations**

8.1 There are none.

## **9 Legal Implications**

9.1 The Borough Council, as Highway Authority, has a duty under the Highways Act 1980 to ensure, so far as reasonably practicable, the safe passage along a highway.

9.2 The Council as Lead Local Flood Authority, has a duty under the Flood and Water Management Act 2010 to reduce the risk of flooding.

## **10 Financial Implications**

10.1 The Flood Reduction programme will be funded by the following:

- Existing Highway Maintenance Revenue budgets
- Successful funding from Thames Regional Flood & Coastal Committee (TRFCC) Local Levy

## **11 Timetable for Implementation**

11.1 Maintenance works set out in the Options Report will commence at the end of bird nesting season and in advance of the autumn.

11.2 Capital works will commence following successful funding bids to Thames Regional Flood & Coastal Committee Local Levy.

11.3 Inclusion of updated public-facing flood information on the Council's website in advance of the autumn.

## **12 Background Papers**

12.1 There are none.

## **Appendices**

1. January 2024 Section 19 Report
2. January 2024 Options Report