

Horncastle Section 19 Flooding report recommendations (S19-729)

No.	Recommendation	Additional info	Authority responsible	Update / Action date
1	Winceby Gardens temporary dyke -LCC considers advising the relevant landowners to assess whether a more permanent mechanism to address overland flows is needed.	It is understood that a dyke has been constructed to the east of Winceby Gardens, which would act as an intervening feature for overland flows. It is also understood that this dyke is currently temporary in nature. Need to ensure that action won't cause issues elsewhere.	LCC and Landowner	Update in April 2025
2	A modelling study of the Thunker Drain should be undertaken to confirm the likely flood extents and depths, both during Storm Babet and hypothetical future storm events. Following this, consideration should be given to carrying out an appraisal for potential flood alleviation schemes, such as enlarging the channel or constructing a bypass channel or storage area upstream. The installation of a river gauge on the Thunker Drain should also be considered.	River Waring and Thunker Drain had bearing on flooding. LCC wants to really understand the flows and capacity and volumes of water to understand the mechanism at play. Computer modelling work. Matthew Harrison to check that study will take into account the effectiveness of SUDS schemes on new developments.	LCC Actions post modelling may not fall to LCC	To be completed by September 2025 Update in April 2025
3	Consideration should be given to improving the banks of the River Waring adjacent to the Coronation Walk properties (e.g. by raising or reinforcing them), as well as carrying out dredging works.	This would be major work. HTC to ask EA about this work.	EA's decision	No timescale Update in April 2025
4	Consideration should be given to implementing additional drainage (e.g. gullies or a linear drain) in the easternmost section of John Brown Close.	HTC's Highways Working Group to take this up with LCC Highways	LCC Highways	Update in April 2025
5	Consideration should be given to raising the kerbs adjacent to the properties in the north of Prospect Street.	HTC's Highways Working Group to take this up with LCC Highways	LCC Highways	Update in April 2025

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6	Consideration should be given to raising the kerbs or adding highway gullies adjacent to the properties along Accommodation Road, as well as implementing interceptor drains at the entrances to each property. The drainage arrangement along Chestnut Close and Mark Avenue should also be reviewed, followed by the rectification of any issues identified.	HTC's Highways Working Group to take this up with LCC Highways	LCC Highways	Update in April 2025
7	Further analysis of the recorded and modelled flood outlines should be undertaken to confirm the extent of flooding associated with the River Bain at Hemingby Lane. Consideration should be given to implementing intervening drainage (e.g. highway gullies, ditches or interceptor drains) adjacent to the properties.	National mapping just updated. May have been partly addressed now that new mapping launched.	EA & LCC	Update in April 2025
8	Works to automate the Swimming Baths Sluice should continue. The progress of such works and the associated timescales should be confirmed with the EA to ensure that it is completed in an efficient manner.	The Swimming Baths Sluice is a manually operated sluice, which is opened in stages during a storm event to allow flows to enter the Old River Bain. During Storm Babet, EA operatives partially opened the sluice; however, they were unable to return to continue opening the sluice due to the storm conditions. This is considered likely to be the case during similar or worse future storm events. It is understood that the EA have proposed to automate the Swimming Baths Sluice, such that the sluice opens in stages automatically as the river level rises. The powers for automating the Swimming Baths Sluice lies with EA. HTC to ask EA about this work and whether HTC can assist the EA in opening the gate during flood conditions.	EA	Update in April 2025

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9	The processes for operating flood structures in the Horncastle catchment should be reviewed by the EA. (It is understood that this has occurred in response to the operational failures at Horncastle during Storm Babet.) In particular, the plan for manually operating the assets in the event they do not work automatically should be reviewed.	It is understood that a review of the processes relating to the operation of the Horncastle FSR has been undertaken, with the proposed improvements as detailed within the Horncastle Chief Engineers Report implemented as of November 2023. The sluice gate has since closed automatically as intended on all required occasions. The plan for manually operating the assets in the event they do not work automatically should be reviewed. This should include consideration of the possibility that EA operatives are unable to reach the assets (e.g. due to flood waters in the road). It is possible that training and emergency authorisation could be given to members of Horncastle Town Council so that select residents are able to manually operate the sluice gates, in the event that these do not operate as intended. The powers for reviewing the processes for operating flood structures in Horncastle would lie with the EA. HTC to ask EA about this recommendation.	EA	Update in April 2025
10	The potential to implement a flood alleviation scheme along the River Waring and Thunker Drain should be considered. Consideration should also be given to evaluating potential additional flood alleviation schemes along the River Bain.	A variety of possible options may be considered, which could include the construction of a flood storage reservoir upstream along this watercourse (similar to the existing Horncastle FSR), or locally constructing defences along the River Waring as it passes through Horncastle. Similarly, consideration should be given to further evaluation of possible alleviation schemes for the River Bain, to account for the flows received from catchments downstream of the Horncastle FSR. The potential for a flood	The powers for evaluating possible flood alleviation schemes would lie with the EA, with support from the Joint Lincolnshire Flood Risk and Water	Update in April 2025

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		alleviation scheme for the Thunker Drain may also be considered. However, this should only be undertaken following a detailed modelling study for this watercourse, as the existing mapping for the drain appear to poorly represent the flood risks relative to what was observed during Storm Babet. HTC have been told by EA that a scheme on the river Waring is not financially viable, but flooding is only going to get worse with additional development. Cllr Colin Davie gave an undertaking at the MP's Flood Forum in March 2024 that a flood alleviation scheme for the river Waring would be looked into. HTC to continue to put pressure on Cllr Davie and the EA for this to happen, also write to MP Victoria Atkins. LCC has identified challenges from the Thunker drain and river Waring and have been supporting East Mercia Rivers Trust with natural flood risk management work along Thunker Drain. LCC is keen to look at localised interventions, even if it's not a single big scheme.	Management Partnership due to the large number of RMAs involved. This includes the EA, who have powers for the River Waring, and LCC and Witham Third District IDB, where the Thunker Drain or other Ordinary Watercourses are involved.	
11	The absence of a link between water levels on the River Bain and River Waring should be verified as part of further investigation into the system.	Based on the EA's assessment of the flood structures in Horncastle following Storm Babet, there is limited connection between high river flows on the River Bain and River Waring. However, there appears to be strong public perception that there is a linkage between these watercourses. Consideration should be given to verifying this is correct, as it would potentially help inform future works for both watercourses, and would also improve public	EA	Update in April 2025

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		confidence in the EA's asset review following Storm Babet. The outcome will be a report explaining the investigations and findings.		
12	Further improvements should be made to the surface water and fluvial flood model for Horncastle, based on the recorded flooding and the findings of the EA's study into Storm Babet.	This should include further consideration of the recommendations made within the independent review of the EA's reporting following Storm Babet, including: • Provision of a risk analysis and uncertainty assessment of the modelling results; • Verification of the modelled discharge from the Horncastle FSR; • Further review of alternative model options; • Completion of a sensitivity analysis for the findings of the impact assessment; • Verification of the river levels and flows at the Victoria Mill monitoring station; • Confirmation that flooding at the Victoria Mill modelling station does not begin when flows are lower than previously anticipated; • Publication of annual chance analyses for rainfall and river flow throughout the catchments. The responsibility for amending the surface water model would fall to LCC, with co-operation from the EA with respect to updating the national flood mapping, whilst the responsibility for updating the fluvial flood model would fall to the EA. Latest flood model has been launched in early 2025, but if it is felt that the new model does not represent what is seen, there is an opportunity to make updates. LCC not seen anything to show that it is inaccurate. HTC to ask EA if it is satisfied with the new national model and why the flood alleviation	The responsibility for amending the surface water model would fall to LCC, with co-operation from the EA with respect to updating the national flood mapping, whilst the responsibility for updating the fluvial flood model would fall to the EA.	Update in April 2025

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		reservoir is not being fully utilised to assist flow in other river.		
13	Flood resistance and resilience measures should be implemented at all the affected properties as part of reparative works.	The resistance and resilience measures for each property should be chosen on a site-specific basis and take into account the method of flood water ingress and extent of flooding. Possible resistance measures which could be considered include: • Use of a demountable flood barrier against the doors of the property during periods of known heavy rainfall and high river levels; • Implementation of airbrick covers against any airbricks at or close to ground level; • Chemical waterproofing methods where flood waters entered via the walls; • Implementation of solid flooring where flood waters entered via the floorboards; and/or • Incorporation of an interceptor drain adjacent to the thresholds of each property. Resilience measures which may also be considered include: • Replacing ground floor carpets with hard flooring; • Installing uPVC skirting boards; • Raising furniture and appliance on plinths; • Using internal lime plaster/render; • Where plasterboards are used, fitting these horizontally instead of vertically, or using moisture resistance plasterboard at lower levels; • Installing non-return valves on air bricks and utility pipework; and • Avoiding storing valuable items within the property at ground level. LLFA cannot force flood resistance and resilience measures onto people. People need to take own actions to protect their property from flooding, if in an area at risk.	The responsibility for the implementation of flood resistance and resilience measures would fall to the residents and owners of each property, with support from the LLFA, where appropriate.	Ongoing

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		There have been a number of Government grants available following storm Babet and all affected homeowners were offered the opportunity to apply for a grant but not all took up the offer. LCC is looking at how it can as an authority support residents getting property protection. LCC been working closely with DEFRA have secured extension to programme and can deliver to all those people who applied for measures. HTC can encourage residents to install flood resistance and resilience to properties at risk of flooding.		
14	The multi-agency flood response plan should be reviewed in light of Storm Babet to ensure it is effective for future storms.	Horncastle's emergency plan has been updated following storm Babet. HTC has adopted a Flood Plan. Now aware that HTC can declare an emergency which did not know when flooding occurred in October 2023. A community exercise is being held on 3rd June to test the plan, with two community engagement sessions taking place beforehand to promote the Community Emergency Plan and exercise. LCC post Babet looking to go into areas to give advice in the form of a flood fair	Lincolnshire Resilience Forum HTC LCC	Update in April 2025
15	More river gauges installed within Horncastle	Only currently have 2 in Horncastle and EA flooding reports reliant on radar data. Currently no proposed locations for additional river gauges, will be influenced by where they can physically be located. LCC happy for HTC to be involved in discussions. Gauges to be monitored for a 10 year period to gather evidence.	LCC	No timescale. Update in April 2025