

Settlement: Luston

Location of Investigation

Figure 1: Large Scale Map showing the location of Luston

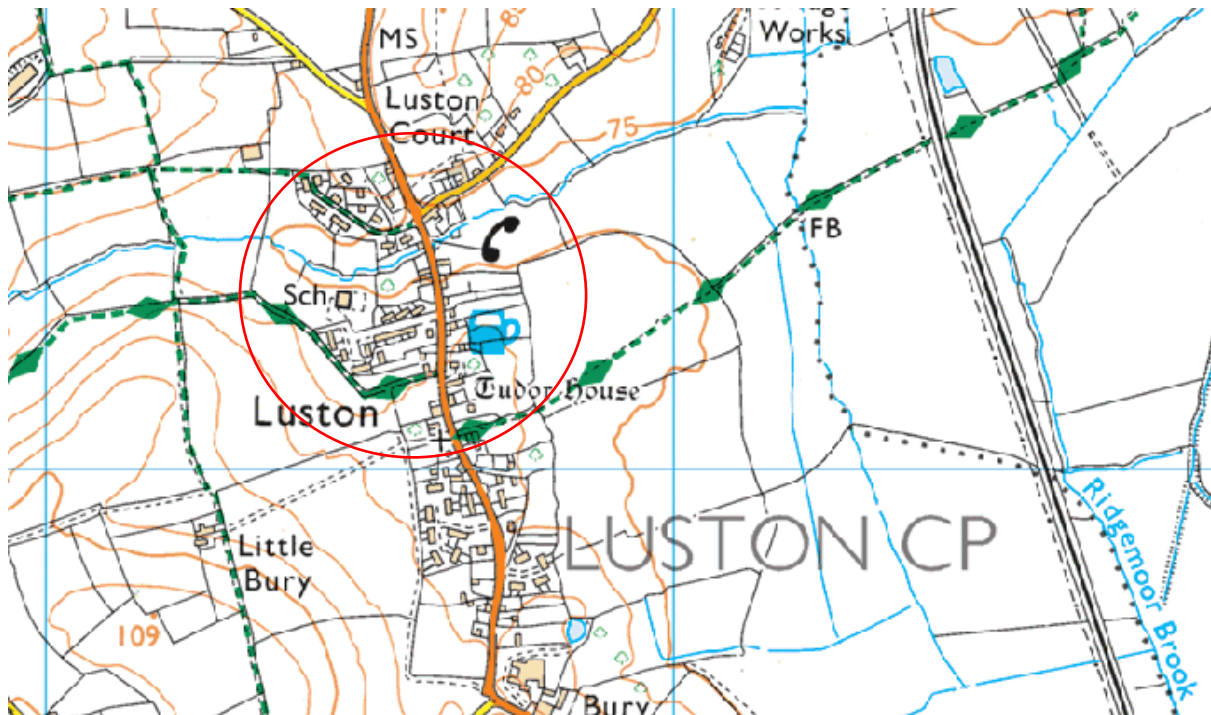


Figure 2: Environment Agency's Flood Map for Planning (Rivers and Sea), June 2021.



Flood Zone mapping has not been completed on the watercourse.

Date of key flood event	February 16 th 2020
Authorities with Flood Risk Management duties or functions relating to the event	Herefordshire Council (Land Drainage Authority) Lugg Internal Drainage Board

The Ridgemoor Brook and its upper tributaries are designated as Ordinary Watercourses which therefore fall under the regulatory supervision of Herefordshire Council Land Drainage Authority and the River Lugg Internal Drainage Board.

Key Flood Event

Flood Type: Fluvial and Surface Water

Watercourse Catchment: Tributary of Ridgemoor Brook.

Five properties are identified in Luston as having recorded internal flooding from a watercourse in February 2020. The flood depth varies from less than 6 inches up to 3ft. In all accounts the duration of flooding was less than 1 day.

Foul flooding is referenced. One questionnaire return also suggested "Water coming down the road, running very fast with nowhere to go when it reached the bottom of the hill".

Previous flooding in July 2007 has been reported by two respondents. Another property reported flooding 13 years ago and one respondent recorded flooding October 2019 and in 2012.

HC records also identify flooding during the 2007 flood event.

Westland Primary School is identified as critical infrastructure and recorded as being impacted during the February 2020 flooding. The school was built on low lying land, surface water runoff causes flooding because the drains cannot convey water away quickly. A dwelling also flooded due to surface water runoff.

The Fire Service attended a domestic property at 1am on 16th February.

Number of Internally Flooded Properties related to key flood event	7
Number of Internally Flooded Properties during most acute flood	7
Impact on Strategic Highway Network	None reported
Impact on Critical Services	Westland Primary School
Health Risks	No injuries or loss of life were reported

Description of Flooding

The Herefordshire Flood Alleviation Strategy (2010) investigated flooding at Luston, which is largely fluvial. There is a bridge on the B4361, but our inspection suggests that this is not likely to be a constriction point.

Luston is located entirely within Flood Zone 1 of the Flood Map for Planning. However, a small watercourse runs through the middle of the village which has not been mapped, accordingly the Flood Zone mapping is misleading. The Surface Water Flood Map indicates that the area around the watercourse is at high risk of surface water flooding. This is most likely to represent fluvial risks associated with the watercourse.

There also appear to be two surface water flow routes in the area. One surface water flow route leaves Yarpole Lane in the north and flows through the fields behind Townsend Park, before entering the watercourse upstream of the B4361.

The other surface water flow route appears to arrive from the south, then appearing to pool behind Westland Primary School before discharging to the watercourse. It is therefore possible that there is a contribution to flood risk from overland flows.

Downstream of the highway the watercourse appears to have been diverted. Any partial blockages where the channel runs deep may have an adverse impact on channel capacity.

Respondents identified the source of flooding as being overland flows and overflowing streams, which would appear to support the above assessment. However, applicants also identified sewer flooding and blocked gullies. One of the respondents describes flooding due to fast flowing surface runoff along a downhill road. This may add another overland flow route to the flood mechanisms in the area.

Damage to Cultural Heritage Sites: There are no listed buildings located in the Flood Zone within Luston.

Previous reports of floods

Prior to the 16th February 2020 flood event, a previous flood event was reported as having occurred in 2007.

Previous Flood Risk Studies

Herefordshire Flood Alleviation Strategy (2010).

Conclusions

The flooding mechanism for this location appears to be complex with contributions from a small watercourse and up to three overland flow routes.

Herefordshire Council Land Drainage Authority proposes to exercise their flood risk management function in response to the recent flooding. Herefordshire Council LLFA have identified a requirement to promote delivery of a feasibility study on the Ridgemoor Brook. DEFRA grant funding is being sought for this study based on the existing fluvial flood risk in the village of Luston. Further governance reports will be required prior to any formal application for funding.

The episode of foul flooding has been reported to Welsh Water for investigation.

Natural Flood Management measures have been implemented on the Ridgemoor Brook and as part of this work a river level gauge board at the road bridge.