

Location

Buscot Wick Village is located within the flood plain of the River Cole (to the west) and the River Thames (to the north). The wider flood plain is relatively flat in this area. To the south of the village there is low relief topography with associated small drainage catchments. These overland flow routes drain northwards.

Buscot Wick is located at the bottom of the catchment on low lying land. The upstream catchment for the Cole is large including the eastern parts of Swindon. Heavy rainfall throughout the catchment, including run-off from fields and areas upstream, and periods of intense rainfall, will contribute to an increase in river levels. There may also be a lag in time for the overland water flow to enter the river.

Flood Risk

The area is at flood risk from both the river and surface water. Further information can be found at [Where do you want to check? - Check your long term flood risk - GOV.UK](#)

The Risk of Flooding from Rivers and Sea map shows that most properties and infrastructure in Buscot Wick are at high risk with more than 3.3% chance of a flood each year. The general area of the village is also at high risk of flooding from surface water.

Weir structure

There is a fixed weir structure in place at the Inglesham gauge. This structure is not operated as there are no movable parts to the structure. This structure would not have contributed to the flooding.

Support from our Flood Resilience Team and Flood Warning

Where homes (and businesses) remain at risk from flooding our Flood Resilience team can work with those customers to improve preparedness, and signpost to sources of information such as the National Flood Forum. One of our Engagement Advisors in the team would be happy to arrange a call with the residents of Weston Cottages or others in the community.

The team also manage the delivery of the flood warning service. Following the September and November 2024 flooding impacts, we received details from a resident of Weston Cottages which enabled us to review the Inglesham Gauge river level used to issue a Flood Warning for the area. We have adjusted our triggers for when we issue Flood Warnings from our Inglesham Gauging Station on the River Cole. This means that in the future, when we expect there will be internal property flooding to homes from the River Cole, we should be able to issue a Flood Warning with more advance notice. Where there are multiple sources of flooding and complex flooding mechanisms this does lead to challenges with the flood warning service, but we are always keen to ensure the service is as timely and accurate as possible.

Flood events

In the last year there have been three storm events that have resulted in flood impacts to the village. These storm events were significant in both the rainfall amount and intensity. The following information outlines the observations of rainfall and river levels for the 23 & 24 September 2024 event.

On the 23 September 2024 the Met Office put in place an Amber weather warning, which included the Oxfordshire area. Significant rainfall was recorded in the Amber weather warning

area on the 23 September 2024. The rainfall on the 23 September 2024 led to widespread flooding impacts across the Oxfordshire area. Many reports indicated localised flooding including impacts to roads, infrastructure and properties. This rainfall event was one of the wettest September events on record. The Met Office have produced information regarding the rainfall event on the 23 September: [Record-breaking rainfall for some this September - Met Office](#).

The nearest rainfall gauge to the village is located at St Johns Lock: [Hydrology Data Explorer](#). Rainfall recorded at St Johns Lock started around 2.00am on the 23 September. There were 2 intense periods of rainfall during prolonged rainfall throughout the day. The rain stopped around 23:30 on 23 September. There was 78.23 mm of recorded rainfall accumulation in one day. For this area the monthly average is 54.21mm ([Brize Norton \(Oxfordshire\) UK climate averages - Met Office](#)). Therefore, just under one and half times the monthly average rainfall fell in one day.

The nearest river gauge telemetry on the River Cole is located upstream at Inglesham [River Cole level at Inglesham - GOV.UK](#). The river levels at this station started to increase from 5.30am on the 23 September reaching possible flooding levels around 6.00am on 24 September. The levels peaked at around 12.30pm on 24 September. The river level gradually decreased reaching normal levels around 1.45pm on 26 September.

In the September and November Storm Bert rainfall events, observation of the River Cole river levels indicated that the river responded to the prolonged, and at times intense, rainfall. This resulted in surface water throughout the River Cole catchment entering the river. The river gauge reflected the increase in water entering the river system with notable increases linked to the high intensity periods of the rainfall event.

The rainfall accumulation in the November Storm Bert event was less but the soils throughout the drainage catchment were saturated. This likely resulted in very little water infiltration into the soils and increased surface water run-off.