

## Section 19 Flood and Water Management Act 2010

### Framsden Flood Investigation – Storm Babet 2023



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## Executive Summary

Storm Babet caused significant disruption to communities across Suffolk between 18<sup>th</sup> - 21<sup>st</sup> October 2023. Framsdén was a community that was significantly impacted, with approximately 16 properties suffering internal flooding as well as disruption to infrastructure and services. Suffolk County Council, as Lead Local Flood Authority, have therefore undertaken a Section 19 Flood Investigation. The report will:

- highlight the probable causes of flooding
- identify options to reduce future flood risk and increase property resilience
- make recommendations for actions by relevant responsible organisations, landowners or homeowners.

Framsdén is located in an area at significant risk of both fluvial and pluvial flooding and the nature of the surrounding topography and geology contributes to the susceptibility of the community to flooding. Areas of Framsdén are low-lying, surrounded by a reasonably steep rural catchment. Multiple flood water flow paths converge near to Framsdén, where the gradient is noticeably shallower. The local geology and soils are susceptible to high run off, making a high number of properties in the village vulnerable to flooding due to intense rainfall events.

Storm Babet delivered significant rainfall to the catchment, following an extended period of above average rainfall. Impacts within Framsdén were widespread and for the purposes of this report, the affected areas have been categorised into three zones. The description of the flood events detailed in the report have been compiled using data submitted to Suffolk County Council, as well as information from Risk Management Authorities (e.g. Suffolk County Council Highways and Anglian Water) and the community.

A comprehensive summary for each zone is provided within the report, outlining the context of the event and the impact. Key findings are that Framsdén was severely impacted by flooding due to the intensity of rainfall, that overwhelmed the natural flow routes and the capacity of watercourses and drainage infrastructure. This situation was compounded when overland flow paths converged and saw the resultant internal flooding of property.

Short, medium and longer term recommendations have been published and each have a potential role to improve resilience and reduce the risk of flooding to Framsdén. For short term measures, key highlights include the implementation of community flood plans, maximising Property Flood Resilience (PFR) grants, and maintenance of watercourses. For medium to longer term recommendations, there is emphasis on the management of water from rural land through new natural flood management features, to reduce flood risk within the catchment.

## Justification for Investigation

Suffolk County Council, Lead Local Flood Authority (LLFA) has determined that in accordance with our criteria, it is considered necessary and appropriate to carry out an investigation into this flood event.

This is in accordance with Section 19 (1) of the Flood and Water Management Act 2010, and in accordance with Section 19 (2) of the Flood and Water Management Act 2010, to publish the results and notify the relevant risk management authorities (RMAs).

### *Section 19 Local authorities: investigations*

*(1) On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate—*

*(a) which risk management authorities have relevant flood risk management functions, and*

*(b) whether each of those risk management authorities has 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 risk management authorities*

<b>Criteria for an investigation (as per Appendix D of the Suffolk Flood Risk Management Strategy):</b>	
There was a risk to life because of flooding?	
Internal flooding of one property (domestic or business) has been experienced on more than one occasion?	
Internal flooding of five properties has been experienced during one single flood incident	✓
Where a major transport route was closed for more than 10 hours because of flooding	
Critical infrastructure was affected by flooding	
There is ambiguity surrounding the source or responsibility of a flood incident	

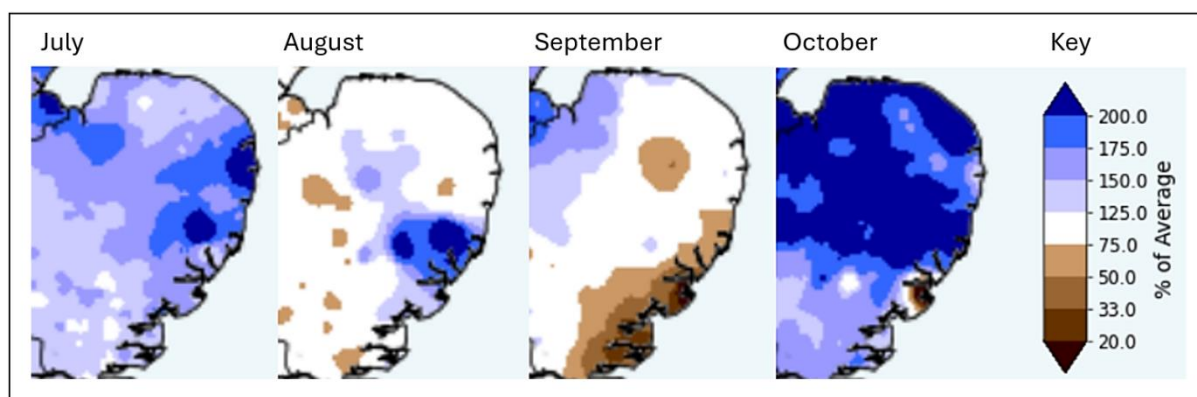
# Understanding the flood context

## 1. What happened during Storm Babet

A succession of weather fronts between the 11<sup>th</sup> and 13<sup>th</sup> of October 2023 brought significant rainfall to the region. Readings indicate that between 30mm and 50mm of rain fell across Suffolk compared with an average of just less than 65mm across the whole month of October according to Meteorological Office weather data (Met Office, 1991- 2020). This significant rainfall in a short space of time resulted in saturated land and rivers reaching their capacity. Shortly after this, Storm Babet followed on the 18<sup>th</sup> to 21<sup>st</sup> of October 2023. The storm brought between 50 mm and 80 mm of rain to much of central and northern East Anglia, with some Suffolk weather stations recording the wettest October day on record.

The Environment Agency River level gauging stations indicated many flows close to or exceeding their highest on record, and the weather remained wetter than average for the rest of the month. October 2023 was the joint wettest on record in the east of England since 1871. During Storm Babet, Suffolk saw the heaviest rainfall across East Anglia causing significant flooding of roads and properties. The river systems rose rapidly across whole catchments due to the existing conditions, which was unusual as storms will often impact a small area and result in a steady progression of flood water downstream. A major incident was declared by Suffolk Resilience Forum (SRF) in the afternoon of the 20<sup>th</sup> of October due to significant impacts on communities and disruption to the road and rail networks.

The following maps illustrate the extent to which the rainfall in the months preceding Storm Babet exceeded the average monthly rainfall for July to October in recent years in Suffolk.



**Figure 1. Average monthly rainfall (July – October 2023) as a percentage of the historic average monthly rainfall**

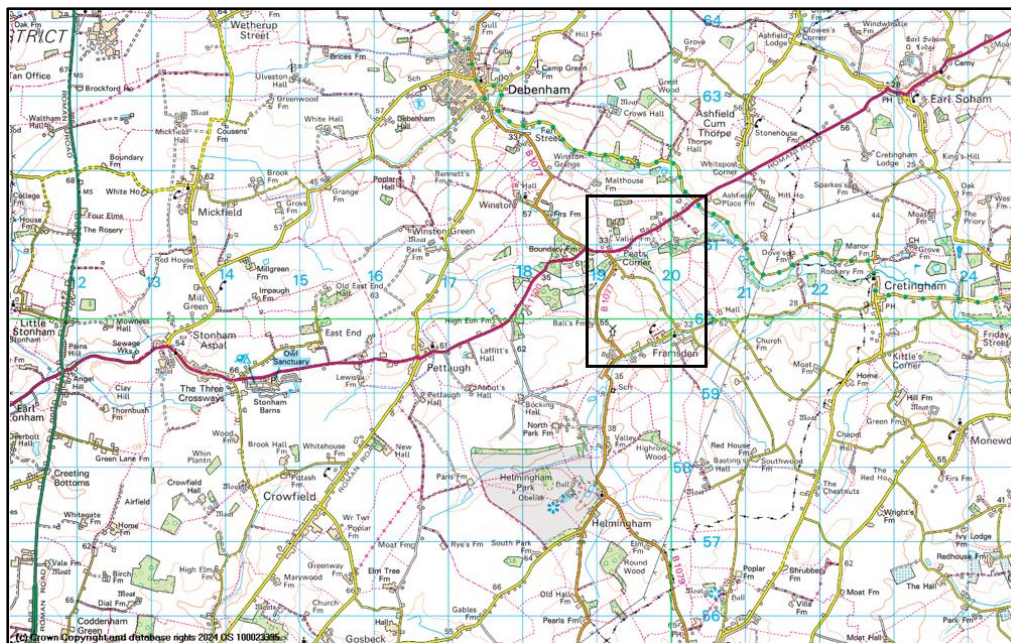
The following report acknowledges that October 2023 and particularly Storm Babet, was an extreme event and will assess the probable causes and impacts. The report will recommend measures to reduce the risk of flooding within the location, in line with best practice, ranging from large to small scale interventions and be targeted at a range of stakeholders. It should be noted that Storm Babet was a significant event,



with a low probability of recurrence. The recommendations will provide advice about reducing flood risk. However, they should not be relied upon as a guaranteed failsafe to mitigate against all future flooding.

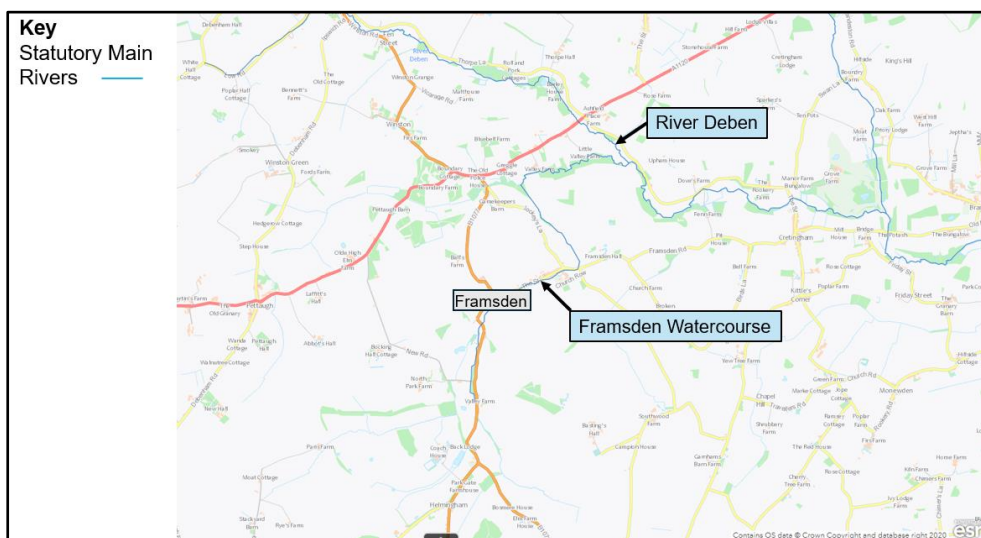
## 2. Location of flooding

The village of Framsden is located in the district of Mid Suffolk, approximately three miles southeast of the town of Debenham.



**Figure 2. Investigation area map**

Figure 3 shows the most significant watercourses in and around Framsden, including the Framsden watercourse, a statutory main river which flows approximately parallel and south of The Street through the village of Framsden. This joins the River Deben (also a statutory main river) at the eastern boundary of the parish.



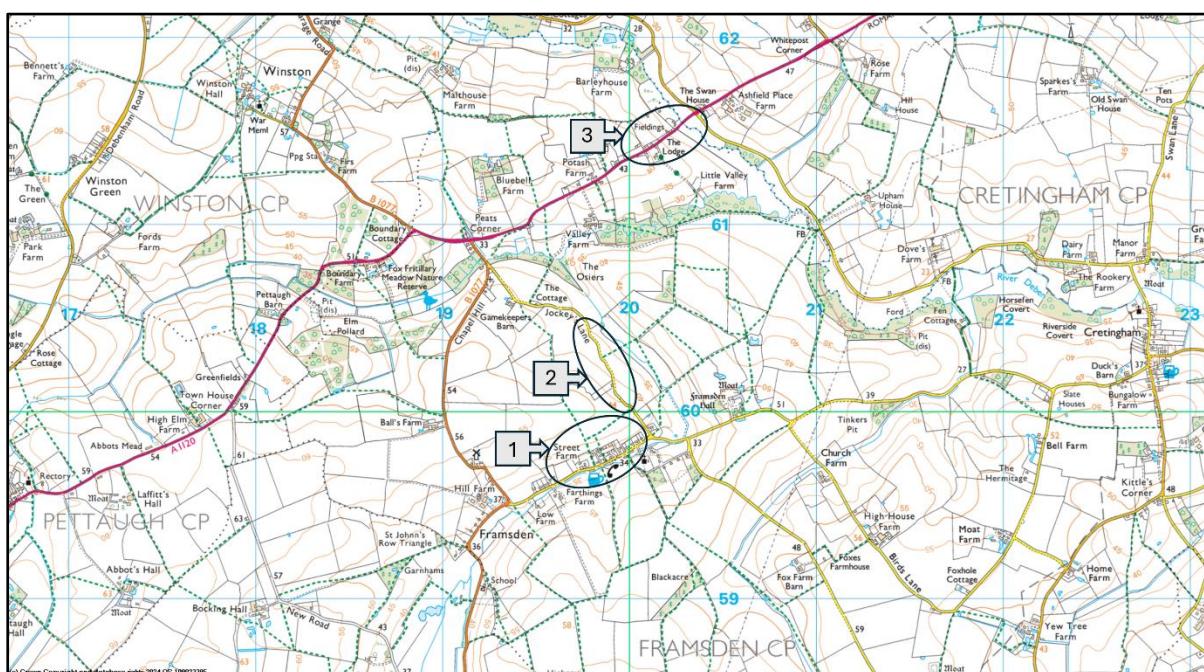
**Figure 3. Location of statutory main rivers and significant ordinary watercourses**

The Environment Agency has permissive powers to carry out maintenance, improvement or construction work on statutory main rivers to manage flood risk. Lead Local Flood Authorities (LLFAs) and Internal Drainage Boards (IDBs) manage the flood risk from ordinary watercourses but responsibility for maintaining watercourses rests with the Riparian Landowner, defined as those who have a river, stream or ditch which runs next to or through their land or property.

On the 20<sup>th</sup> October 2023, Storm Babet resulted in significant rainfall across Suffolk on already saturated ground due to above average rainfall in the preceding weeks. Framsdén was significantly impacted with approximately 16 properties reporting internal flooding. Flood water was described as coming from several sources including surface water runoff from surrounding fields (pluvial), the overtopping of local watercourses (fluvial) and overwhelmed drainage systems. Within this report, the term ‘flood water’ may be used to describe all types of flooding.

For the purposes of this investigation the various areas affected by flooding have been separated into three distinct zones:

1. The Street
2. Jockey’s Lane
3. Eastern section of A 1120 (Framsdén)



**Figure 4. Distinct flood zones**

### **3. Records of any historical flooding**

A review of Suffolk County Council’s Highways reporting tool, local and social media reports did not indicate any previous episodes of internal flooding of property in Framsdén. However, Environment Agency records indicate that five properties flooded

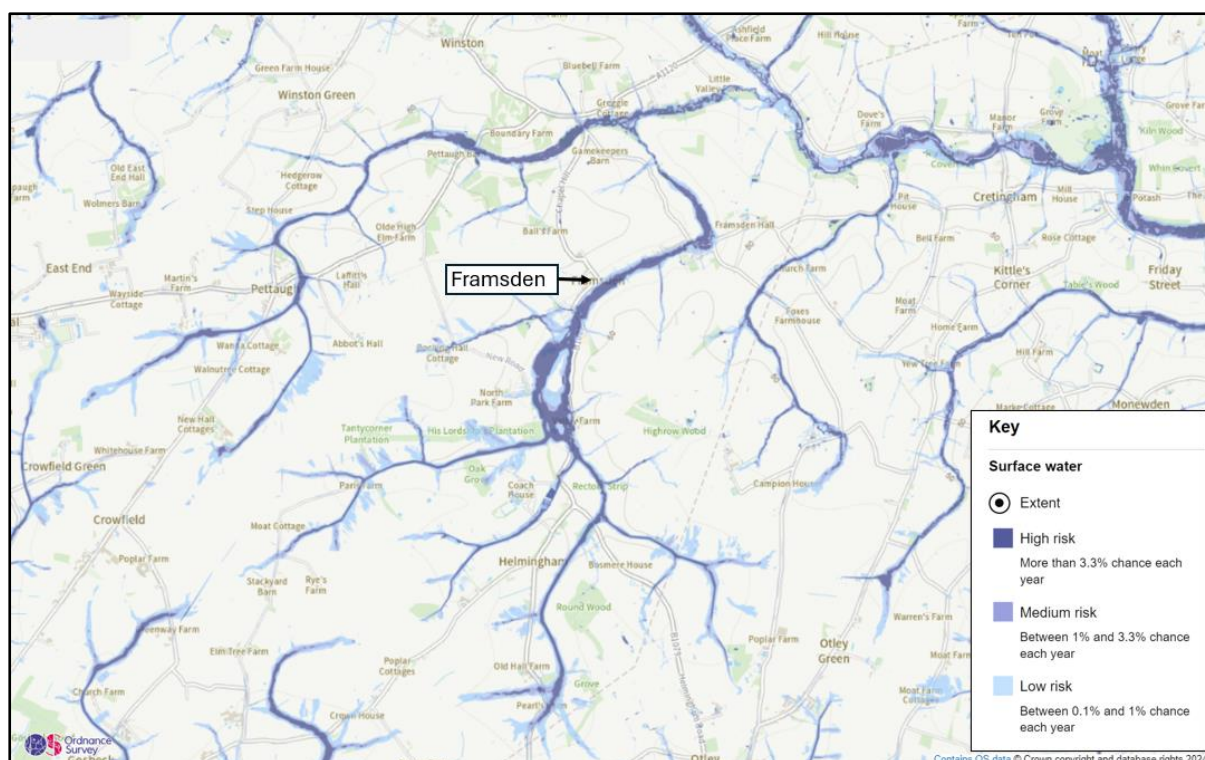


in the Oct 11th-15th 1993 event along The Street. Information received from a local resident also suggests that property on the south side of The Street flooded in 1993. Historic Ordnance Survey maps indicate that areas to the east of Jockey's Lane on the east side of the Framdsen watercourse and also either side of the River Deben (in the vicinity of the A1120) are liable to flooding.

Anglian Water (AWS) has no foul water drainage system in Framdsen and there have therefore been no reports of sewage flooding from AWS assets.

#### 4. Predicted Flood Risk

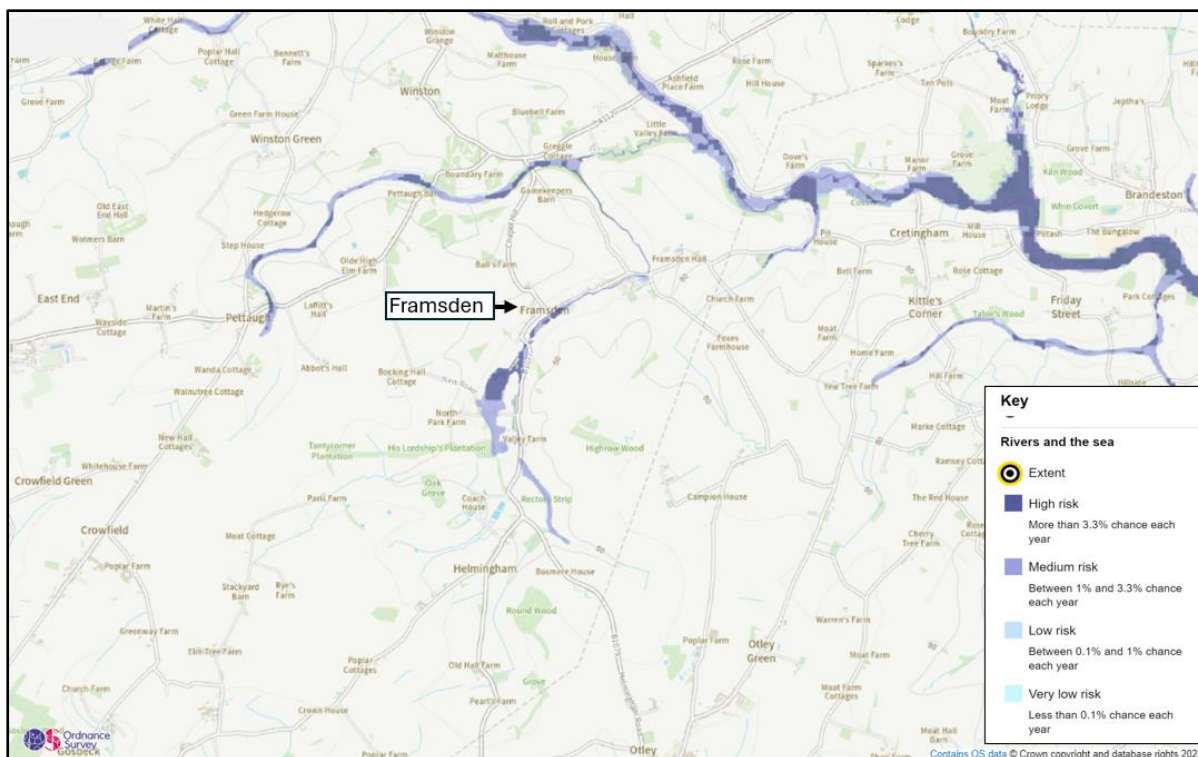
Framdsen parish has significant surface water flow paths, which channel water from the southwest, through the village (where properties were impacted) and then towards the River Deben (Fig.5). Framdsen village and an area immediately upstream, to the southwest of Framdsen, are projected to be at high risk of surface water flooding. Additionally, there is an area of high surface water flood risk beside the River Deben, on and adjacent to the eastern end of the A1120, where impacted property is also located. During Storm Babet, localised surface water flooding was also reported to property to the northeast of Framdsen on Jockey's Lane and surface water and groundwater flooding to property further up the east-facing slope from the River Deben on the A1120. These locations are not shown to be at significant surface water flood risk on national mapping.



**Figure 5. Projected flood risk from surface water**

Fluvial flood risk in Framdsen village is associated with Framdsen watercourse (designated main river), which runs south of The Street (Fig.6). In the eastern part of

the village, where most of the impacted properties are located, the river is projected to remain mostly in channel during high, medium and low risk scenarios. However, during Storm Babet, flood water is reported to have overtopped the river in this section of the village and combined with surface water. East of the junction between The Street and Jockey Lane is an area which is at risk of surface water and fluvial flooding where considerable volumes of water also accumulated during Storm Babet. Fluvial flood risk from the River Deben also affects the eastern end of the A1120 in the parish, where properties were affected by flooding.

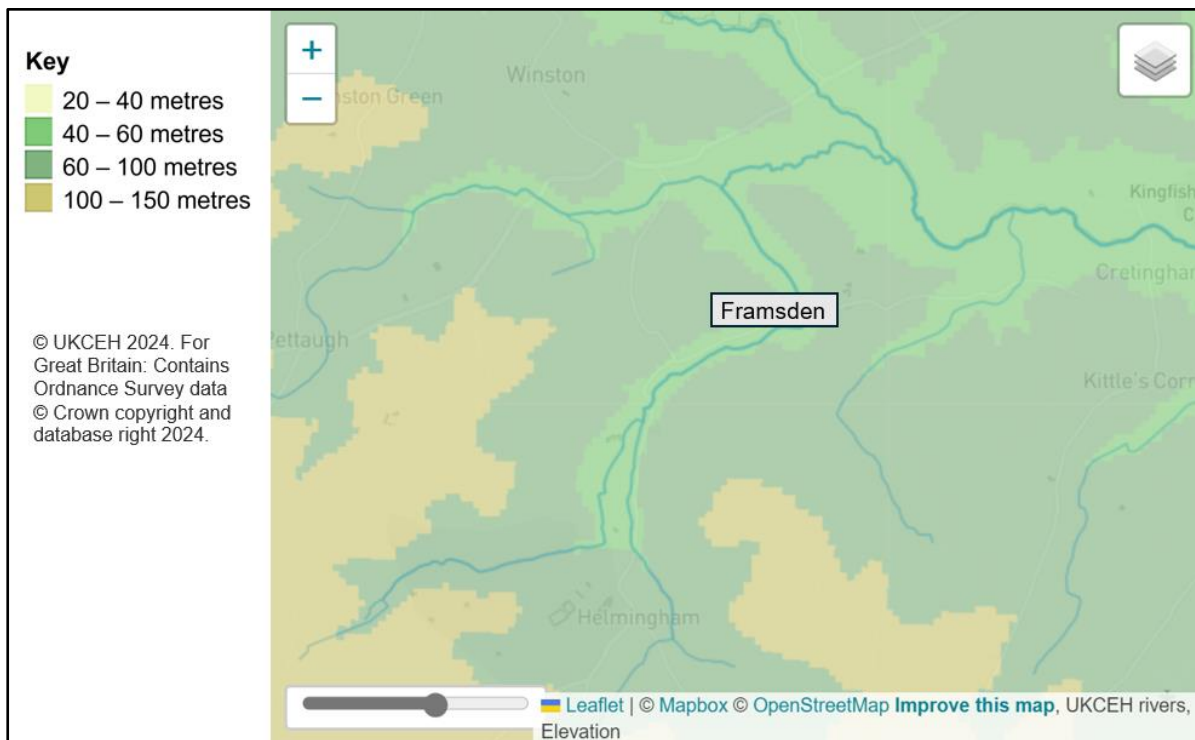


**Figure 6. Projected flood risk from rivers**

### 5. Catchment characteristics

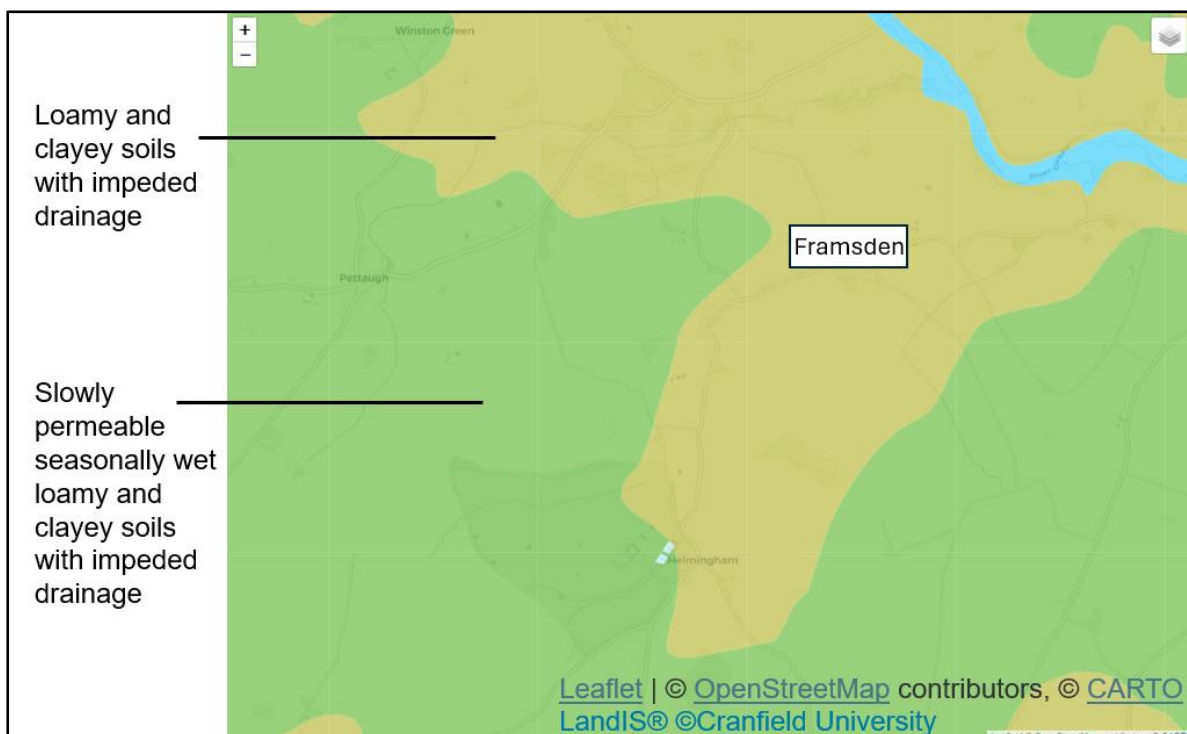
Framdsen is situated in a rural area with predominantly arable agriculture. The village is located mostly to the north side of the Framdsen watercourse, a tributary of the River Deben, which flows approximately southwest to northeast, before joining the River Deben downstream.

The low-lying nature of the village means that during high rainfall events considerable flows of water converge towards Framdsen and the River Deben (see Fig. 7). Overwhelmed infrastructure and watercourses may be observed during these intense rainfall events.



**Figure 7. Elevation map of catchment area (National River Flow Archive)**

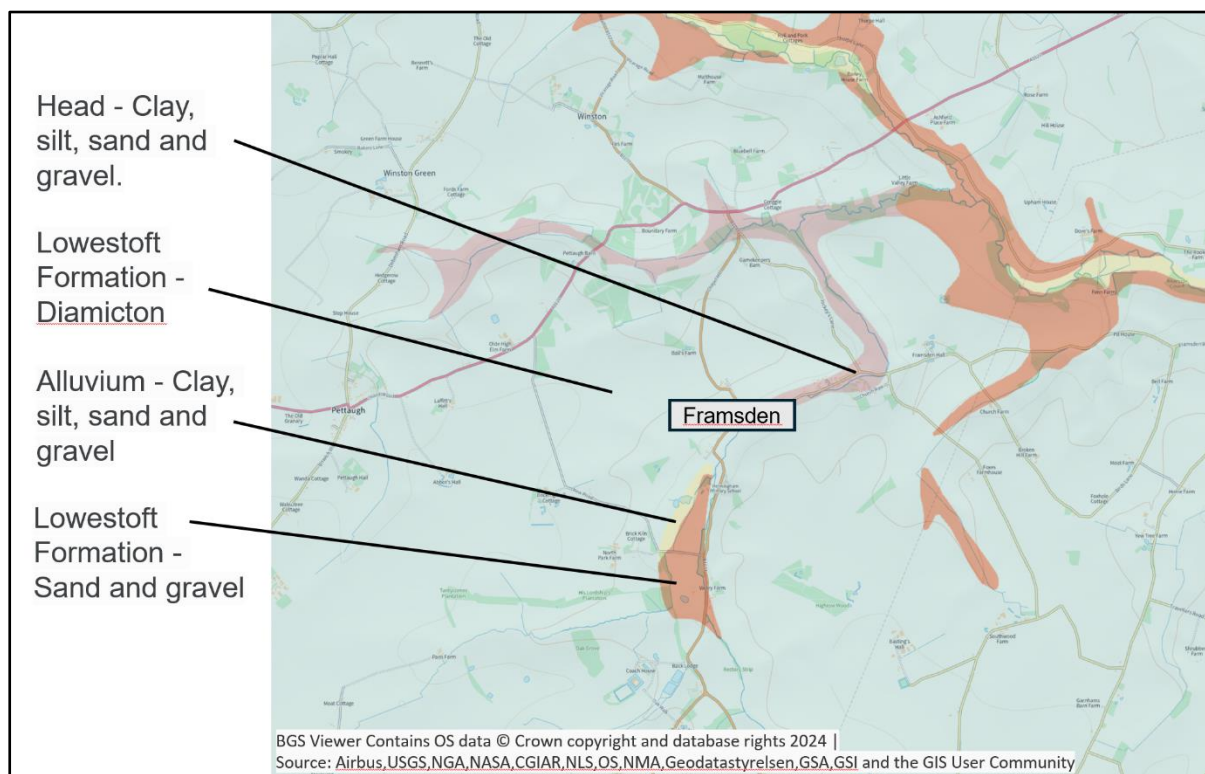
The soils surrounding Framsdan are loamy and clayey with impeded drainage, meaning that water permeates more slowly and surface water runoff is greater, particularly during intense rainfall. However, the saturated nature of the soils leading up to the event would also have prevented some infiltration.



**Figure 8. Soil map of catchment area (LandIS Soilsclapes)**



Fig. 9 shows that much of the superficial geology surrounding Framdsen is made up of 'Lowestoft Formation – Diamiction' which is described by the British Geological Survey as a diverse mixture of clay, sand, gravel, and boulders varying widely in size and shape. This is sometimes known as boulder clay. This generally has a low permeability meaning water will tend to flow off it before it can infiltrate, which also reflects the reports collected during Storm Babet.



**Figure 9. Superficial geology (BGS Viewer)**

The bedrock in Framdsen and in the surrounding upstream area of the catchment consists of various chalk formations which are generally relatively permeable. However, during short term intense rainfall events, soil composition and superficial geology become more influential in affecting the volume of surface water runoff. Combined with the topography within the catchment, these make Framdsen susceptible to extreme rainfall events. Saturated ground and high rainfall, like that of Storm Babet, will further emphasise the vulnerability of the parish and localised flooding could be experienced.

## **Flooding Sources, Pathways & Receptors**

Storm Babet was an extreme event which came at a time when Suffolk had experienced a significant amount of rainfall in the preceding weeks.

The description of the flood events described below will discuss the probable sources of flooding, the observed flow paths through the community and the receptors which have been affected. The term 'floodwater' may be used to describe both fluvial (water from a designated main river) and pluvial (surface water run-off) flooding. This section has been prepared using reports submitted to Suffolk County Council via the online Highways Reporting Tool, a subsequent request to Framsdén parish council for community information and site visits.

Data from surrounding Environment Agency rain gauges indicates that a significant volume of rain was experienced during Storm Babet. The nearest rainfall gauge to Framsdén is at Earl Soham. It recorded 68.5mm of rainfall between 23.15 on 19<sup>th</sup> October and 20.00 on 20<sup>th</sup> October 2023 and over half of this rainfall, 35.3mm, fell between 8.30 and 11.30am.

Framsdén is not within an area covered by a flood warning. However, Framsdén is within the wider Flood Alert area of "The Rivers Deben and Lark" (code 054WAFSF4AC). This extensive flood alert can be triggered from rising river levels reaching a trigger threshold from the issuing gauges at either Debenham or Brandeston on the River Deben, or Clopton on the River Lark.

On 18<sup>th</sup> October 2023, a flood alert was issued at 22:12pm and remained in force until it was removed on 24<sup>th</sup> October 2023 at 08:17am. This flood alert was issued on several more occasions throughout the autumn and winter months of 2023-2024.

Prior to Storm Babet, agricultural soils in the vicinity were reported by landowners to be at 75% moisture holding capacity and only able to hold a further 25mm of rain. Approximately 50 attenuation ponds in the Framsdén watercourse catchment were also full. This supports the thesis that there was limited capacity for further water infiltration during Storm Babet, leading to increased surface water flooding.

Detailed descriptions of each investigation area can be found below.

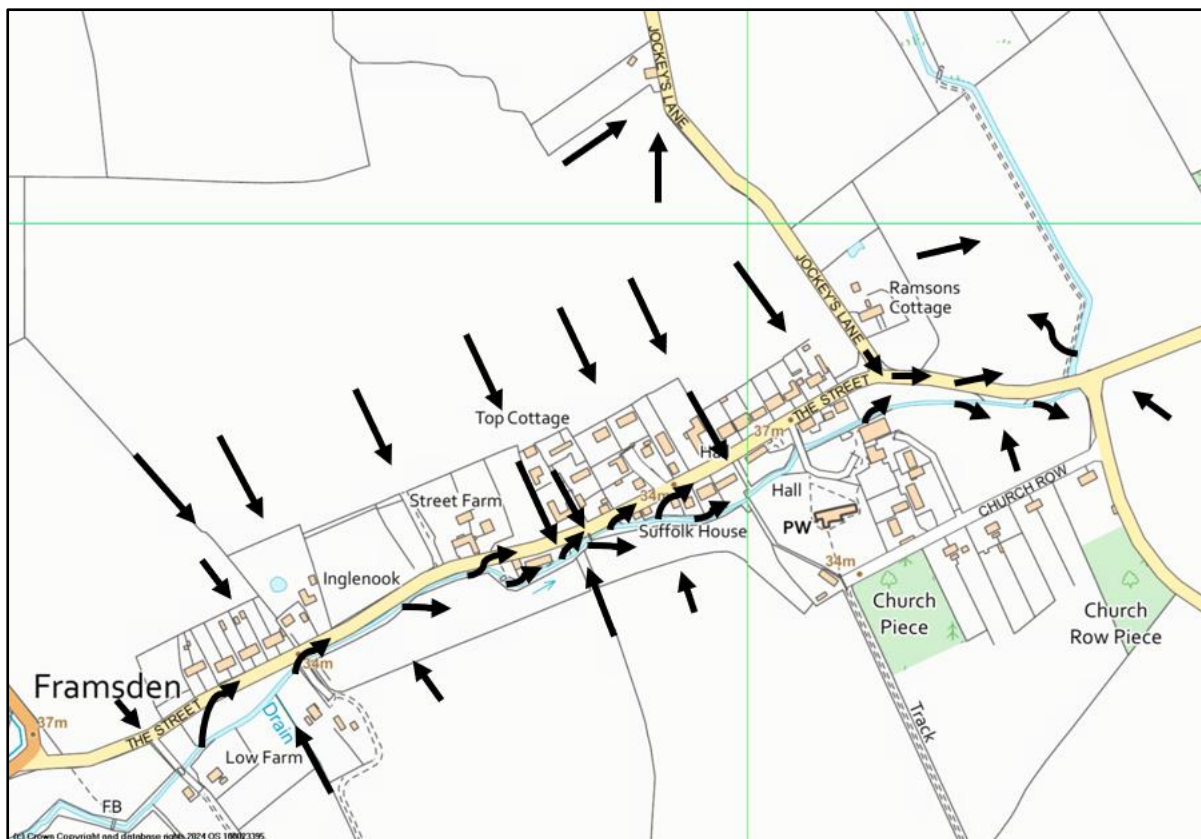
### **1. The Street**

The Street was the most severely affected area within the village, with approximately 13 properties known to have internally flooded.

Incidents of property flooding were first reported when significant rainfall caused large quantities of surface water to flow from the fields, impacting the rear of properties on the north side of the eastern end of The Street. Reports describe this as not having



been observed for 34 years. Floodwater also flowed between some of the properties and began to collect on The Street, subsequently entering properties on the north and south side from the front, particularly those with driveways and properties at lower levels than the highway (Image 1). The road was reported as flooding by 10.15am on the 20<sup>th</sup> October.



**Figure 10. Approximate floodwater flow paths, The Street and Jockey's Lane**

There are no ditches currently within the fields to the rear of the properties on the north side of The Street, having been reported to have been removed when field drainage was installed 70 years ago. Mole drains had been redone 2 years prior to Storm Babet but the drains were described as having been overwhelmed by the volume of water. Fields were ploughed across slopes (horizontally), rather than down slopes (vertically) which is beneficial in slowing surface water flow but would have had a relatively small effect in the intense rainfall of Storm Babet. There is currently no means of attenuating the flow of surface water from these fields if the drainage network exceeds capacity.

Witnesses describe that after properties on the north side of The Street were flooded by surface water from fields, reported to have happened by 10.15am on the 20<sup>th</sup> October, Framsden watercourse overtopped its banks and began to impact the rear of properties on the south side of The Street (Image 2). The fluvial flood water merged with surface water, already present on the highway and further exacerbated the flooding of properties on the north side of The Street. Internal flooding of property on the north side of The Street was reported to have reached approximately 23cm.

Floodwater had entered properties on the south side of The Street by 2pm on 20<sup>th</sup> October. Water levels on the road were reported as reaching approximately 1 metre in depth. British Telecom's cabinet was submerged, causing properties to be disconnected from telephone and broadband services until water levels subsided and services were restored.

Water levels in flooded property on the north side of The Street were reported to have started dropping at about 6pm. with the majority of floodwater having cleared property by 9.30pm. Water levels had subsided in property on the south side of The Street by the morning of 21<sup>st</sup> October.

Surface water runoff from adjacent fields appeared to be less significant from the south side of The Street, compared with runoff from fields on the north side. This may have been partly due to vegetation coverage on the fields at the time of the event, the south being long grass compared with the north, where crops were described as only recently having been drilled and fields had exposed bare soil. Although a surface water flow path and associated flood risk is indicated on the south side of the river, initially the impacts of water flow off the field were also reduced, assuming some of the flood water at first flowed away in the river which intersects the field, before reaching any property on the north side of the river. However, once the watercourse had overtopped, there was little distinction and surface water from the south side merged with the existing flood water on The Street.

Silt and vegetation were reported as having accumulated in Framsdén watercourse due to a lack of maintenance which could have hindered the flow of floodwater away from the village. The bridge behind the village hall garden was reported after Storm Babet as accumulating a lot of detritus which has been partially cleared by residents. The Environment Agency undertakes annual maintenance of in-channel vegetation in the Framsdén watercourse which is scheduled to be carried out each November.

The Street was reported as being flooded again on 18<sup>th</sup> February 2024. A flood alert was also in force from the 18<sup>th</sup> – 20<sup>th</sup> February 2024.

In summary:

- Intense and prolonged rainfall exceeded the capacity of field drains and surface water flowed across fields to the north and south of the Street towards Framsdén watercourse.
- Surface water from fields to the north flowed into and between properties on the north side of The Street and collected on the highway.
- Initially surface water from the fields on the south side of the river joined the river flow.
- Later, the river overtopped its banks flooding properties on the south side of the Street from the rear.

- Fluvial water merged with surface water, contributing to further flooding of properties and the highway.

Recommended actions:

- Report observed blockages, such as fallen trees, in Framsdén watercourse to the Environment Agency
- Report observed blockages of debris under highways bridges to Suffolk Highways authority.
- Residents to install Property Flood Resilience (PFR) via grant funded scheme.
- Explore potential natural flood management measures (eg. leaky dams and attenuation ponds) to “slow the flow” and attenuate water on surface water flow paths and ditches on fields south of Framsdén watercourse.
- Explore potential natural flood management (NFM) measures (eg. rough buffer strips, bunds, and/or ponds) for attenuating excess surface water flows from the fields on the north side of the eastern section of The Street.
- Explore potential NFM measures which aim to attenuate surface water in the upper catchment of Framsdén watercourse (eg. storage ponds and wetland areas).

## **2. Jockey’s Lane**

Properties on Jockey’s Lane reported flooding from surface water from neighbouring fields. The gradient caused surface water to flow downstream in a north and northeasterly direction, impacting the properties to the rear.

In summary:

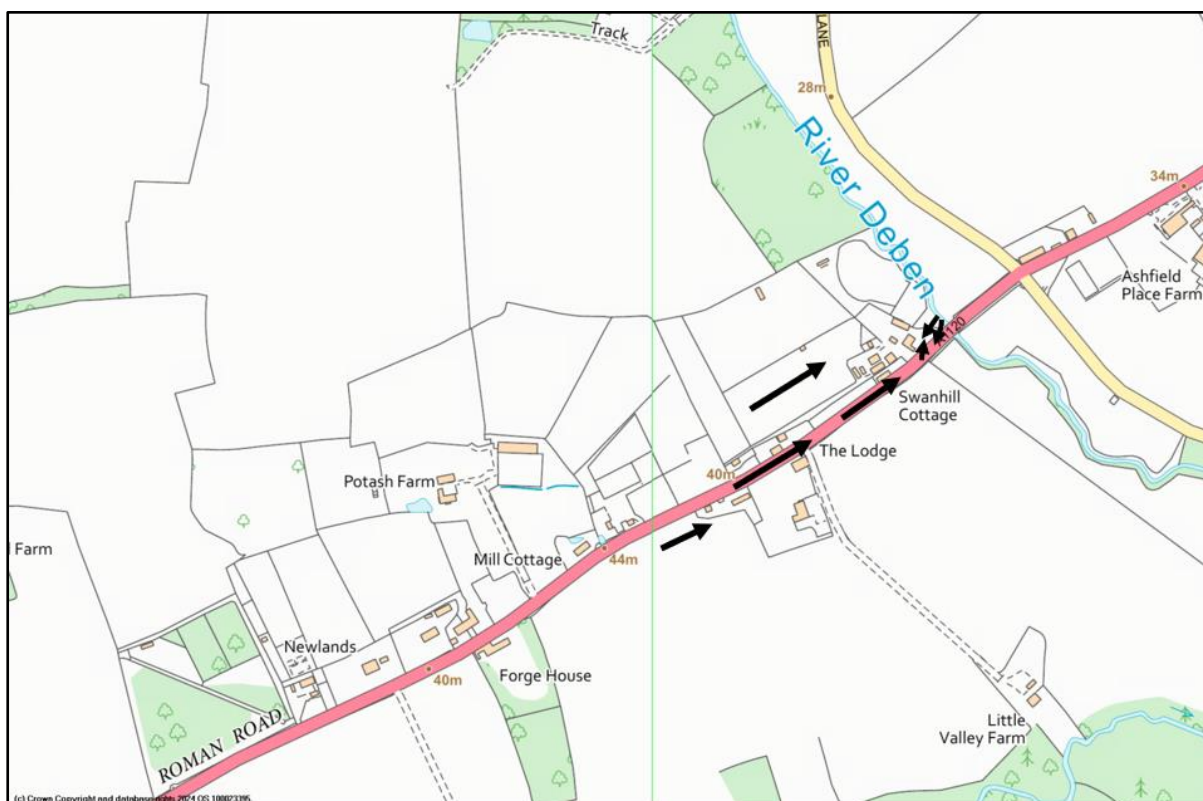
- Intense and prolonged rainfall exceeded the capacity of field drains and surface water flowed across fields to impact property.

Recommended actions:

- Residents to install Property Flood Resilience (PFR) via grant funded scheme.
- Explore potential natural flood management measures (eg. rough buffer strips) for attenuating excess surface water flows towards Jockey Lane property from the field on the north side of the eastern section of The Street.

## **3. Eastern section of A1120 (Framsdén)**

Impacted properties in this area were located near the top and bottom of Swan Hill, A1120, to the west of the River Deben. Flooding near the top of the hill was attributed to surface water and groundwater flooding. At the bottom of the hill, property was affected by surface water and fluvial flooding.



**Figure 11. Approximate floodwater flow paths Swan Hill, A1120**

Property on the A1120, further west up the slope (Swan Hill) from the River Deben reported to have experienced internal flooding at approximately 9:30am, with flood water depths up to 15cm. Property in this location has since flooded again on 24<sup>th</sup> May 2024. The highway is elevated at this location and therefore surface water flowed from the highway towards the River Deben, entering property driveways which are at a lower elevation than the A1120 (Images 4 and 5).

At 12.30pm water continued to rise in the River Deben and at 2.30pm property close to the River Deben was flooded, reported to be primarily from fluvial water from the River Deben overtopping its banks. The bridge on the A1120 over the River Deben was unable to accommodate all the river flow and was reported to have exceeded capacity. This caused water to back up on the north side of the bridge, with the river level close to the top of the wall. This contributed to flooding of property in the vicinity of the bridge whilst the flood plains to the south of the bridge remained relatively clear (see Image 3).

Fluvial floodwater was supplemented by surface water from the highway. Drainage assets were overwhelmed. Concerns have been raised by residents that gullies on this stretch of the A1120 are frequently blocked from mud deriving from heavy vehicles eroding the highway verges (Images 6 and 7). SCC Highways are aware of gullies on Swan Hill that are not fully functional and anticipate investigating and resolving this.

Surface water from fields added to highway flooding. Water levels peaked at 6.30pm reaching 40-60cm internally in properties and 1.5-2m on the riverbank. Floodwater had dissipated by the morning of the 21<sup>st</sup> October.

In summary:

- Surface water and groundwater caused internal flooding to properties close to the top of Swan Hill on the south side.
- Surface water on the A1120 flowed east down the highway on Swan Hill towards the River Deben, entering properties via driveways at the bottom of the hill. This was supplemented by surface water from fields.
- Storm drains on Swan Hill on the A1120 were unable to cope with the volume of surface water on the highway.
- The capacity of the bridge over the River Deben on the A1120 was exceeded, contributing to water overtopping the banks on the north side of the bridge which merged with surface water and flooded adjacent properties.

Recommended actions:

- Increase frequency and ensure completion of maintenance cycle for gullies on Swan Hill.
- Investigate/resolve non-operational gullies to west of river on Swan Hill.
- Report observed blockages of debris under the River Deben bridge to Suffolk Highways authority.
- Residents to install Property Flood Resilience (PFR) via grant funded scheme.
- Explore the potential for NFM measures to reconnect the River Deben with the floodplain between Debenham and the A1120 to allow for greater water attenuation on the floodplain.



## Images of Flooding

Photos included in the report have been submitted via a range of sources, for example customer reports, community information and by Risk Management Authorities. The use of photos has been included in good faith to support the investigation and provide further context of the flood event.



**Image 1. View west along The Street during Storm Babet**



**Image 2. View looking south across gardens and Framsdén watercourse to the far bank of the watercourse from property on the south side of The Street during Storm Babet**



**Image 3. North side of River Deben bridge at the bottom of Swan Hill, A1120, during normal winter river flow**





**Image 4. Flooding from the highway entering a driveway at the bottom of Swan Hill, A1120 on 21st February 2023, after a couple of hours of light rain**



**Image 5. Surface water pathway from the A1120 on to property at the bottom of Swan Hill**



**Image 6. View down Swan Hill, A1120, showing erosion of verge**



**Image 7. Gully on Swan Hill, A1120, blocked by erosion of verge**



## Risk Management Authorities, Non-Risk Management Authorities and flood risk functions

The following section acknowledges both RMA's and Non-RMA's relevant to Framsdan and provide an overview of their flood risk functions. The table has been compiled from information collated as part of the investigation. It is not exhaustive, and it should be acknowledged additional organisations and group may be active within the community.

<b>Risk Management Authority</b>	<b>Relevant Flood Risk Function(s)</b>
Suffolk County Council	Lead Local Flood Authority, Highways Authority & Asset Owner
Environment Agency	Lead organisation for providing flood risk management under its permissive powers and warning of flooding from main rivers
East Suffolk Water Management Board	Asset Owner
Babergh & Mid Suffolk District Council	Local Planning Authority & Asset Owner
<b>Non-Risk Management Authority</b>	<b>Relevant Flood Risk Function(s)</b>
Private Landowners	Riparian responsibilities for watercourses
Private Homeowners	Improving flood resilience to property
Parish Council	Manage flood risk at a community level, prepare and produce flood action plans and maintain watercourses where present on land they own.

### Action(s) completed to date:

The following section acknowledges actions that RMA's and Non-RMAs have implemented or are currently in progress since Storm Babet and prior to publishing of this report.

<b>Action</b>	<b>Responsible Party</b>	<b>Progress</b>
Offer of £5k Property Flood Resilience (PFR) grant funded scheme to eligible properties that flooded during Storms Babet	Suffolk County Council Lead Local Flood Authority (LLFA)	Ongoing
Carry out maintenance of Framsdan watercourse from the B1077 for 1.7km, including the stretch parallel to the Street	The Environment Agency	Routine maintenance scheduled for November each year in form of in channel vegetation management.

Review cleansing frequency of gullies along Swan Hill, A1120	Suffolk County Council Highways Authority	Cycles have been reviewed and frequency increased so that all gullies are cleansed annually
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## LLFA Recommended Action(s):

The following section provides a range of flood mitigation measures that could be implemented to reduce the risk of flooding in Framlingham. They have been derived from evidence collected during the investigation and included having been considered relevant and realistic to implement. The implementation of actions falls to the relevant responsible party. Progress on the action will be monitored by Suffolk County Council and updates published, but it should be acknowledged that the Council does not have powers to enforce the implementation of recommended actions.

Action	Responsible Party	Timescale for response	Latest Progress Update for Actions
<b>Short Term Actions</b> (e.g. standard maintenance activity and initial investigation of options that can be undertaken with limited need for forward planning)			
Establish a Community Emergency Plan that includes plans to manage future flood events –Liaison with Suffolk Joint Emergency Planning Unit	Framsden Parish Council	6 months	
Maximise the uptake of the £5k PFR Grant currently available to residents before the April 2025 deadline	SCC LLFA / Residents	6 months	Ongoing
Ensure riparian landowner responsibilities are understood with regard to watercourse management in Framsden	SCC LLFA/ EA	6-12 months	Ongoing
Ensure the completion of highway drainage asset cyclic maintenance across Framsden. Key areas include Swan Hill A1120.	SCC Highways Authority	Annually	Last cyclic cleans June and July 2024. Next cleanse planned June and July 2025
Investigate and resolve non-operational gullies on Swan Hill, A1120	SCC Highways Authority	6 months	
Report observed blockages, such as fallen trees, in the	Residents/EA	N/A	Ongoing

watercourses (main rivers) to the Environment Agency			
Report any observed blockages below the road bridges over the watercourses to the relevant authority to be investigated and removed if appropriate.	Residents, SCC Highways Authority	N/A	Ongoing
<b>Medium Term Actions</b> (e.g. longer planning timescales and potential need to source funding but potential for greater impact)			
Explore potential NFM measures to 'slow the flow' and attenuate water on surface water flow paths on the fields south of Framsdan watercourse, eg. leaky dams and attenuation ponds	Landowners supported by SCC LLFA, EA	12 - 24 months	
Explore potential NFM measures for attenuating excess surface water flows towards The Street and Jockey Lane from the fields on the north side of the eastern section of The Street, eg. buffer strips, bunds and/or ponds	Landowners, supported by SCC LLFA, EA	12-24 months	
Explore further potential NFM measures which aim to attenuate water in the upper catchment of Framsdan watercourse eg. storage ponds and wetland areas.	Landowners supported by SCC LLFA, EA,	12-24 months	
Explore the potential for natural flood management measures reconnecting the River Deben with the floodplain between Debenham and the A1120 bridge to allow for greater water attenuation on the floodplain.	Landowners, supported by SCC LLFA, EA,	12-24 months	
<b>Long Term actions</b> (significantly longer timescale and budget required with potentially greater positive impact)			
Deliver any capital interventions that are economically, technically and environmentally feasible and acceptable to improve the	SCC LLFA, EA and landowners	TBC	

flood resilience of the village, eg. NFM and PFR measures.			
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## Approval

This report will be reviewed and updated every 6 months until actions are marked as complete.

Reviewer	Date of Review

## **Disclaimer**

This report has been prepared and published as part of Suffolk County Council's responsibilities under Section 19 of the Flood and Water Management Act 2010. It is intended to provide context and information to support the delivery of the local flood risk management strategy and should not be used for any other purpose.

The findings of the report are based on a subjective assessment of the information available by those undertaking the investigation and therefore while all reasonable efforts have been made to gather and verify such information may not include all relevant information. As such it should not be considered as a definitive assessment of all factors that may have triggered or contributed to the flood event. Should there be additional information available to develop the report, please email to [floodinvestigations@suffolk.gov.uk](mailto:floodinvestigations@suffolk.gov.uk).

The opinions, conclusions and recommendations in this Report are based on assumptions made by Suffolk County Council when preparing this report, including, but not limited to those key assumptions noted in the Report, including reliance on information provided by third parties.

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The implications for producing Flood Investigation Reports and any consequences of blight have been considered. The process of gaining insurance for a property and/or purchasing/selling a property and any flooding issues identified are considered a separate and legally binding process placed upon property owners and this is independent of and does not relate to Suffolk County Council highlighting flooding to properties at a street level. Property owners and prospective purchasers or occupiers of property are advised to seek and rely on their own surveys and reports regarding any specific risk to any identified area of land.

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