

# **Bungay and Surrounding Area Flood Risk Management**

December 2021

# What are we telling you about?

This update is for the communities of Bungay, Ditchingham Dam, Earsham and Wainford who were affected by flooding in December 2020. It will update you on what we have been doing and the further work we have planned. We have also included a frequently asked questions section which is based on enquiries we have received from members of the public.

## **Bungay and Surrounding Areas Flood Risk Management Project**

As we mentioned in our June briefing document, we are setting up a project to investigate ways to reduce the risk of flooding from the River Waveney to a number of properties.

We have been undertaking property threshold surveys in the area. This topographic survey will establish the height of doorsteps and other water entry points of properties to help us understand if flood water will enter a property and to what depth.

Our flood risk model of the River Waveney is being updated to help improve our understanding of flood risk in Bungay and the surrounding area. Working with our flood risk consultants, Jacobs, this modelling will help inform a business case and a long list of options to manage the flood risk. This is expected to be completed in the summer of 2022.

We will be working with our partners, East Suffolk Council, Suffolk County Council, Internal Drainage Board and Norfolk County Council. We will be looking to share our findings with the community and would welcome your views on the potential options. We will be in touch with how you can view and provide comments in due course. If you have any questions in the meantime, please get in touch using the contact details at the end of this briefing.

#### **Main River Maintenance**

We have a routine maintenance programme for the main rivers in the River Waveney catchment. In the autumn of 2020, we cut weeds (by machine) in Bungay Drains and Chainbridge Beck. Vegetation was also cleared by hand from the Bungay Tin River. In addition, we used a boat to cut weeds between Ellingham Mill and the A143 road bridge.

In November 2021 a weed cut by machine was undertaken in the Bungay Drains and Chainbridge Beck, and vegetation has been cleared by hand from the Bungay Tin River.





# **Community Flood Group**

We would like to support the community in setting up a community flood group, especially as the community will be a key stakeholder in discussing the most suitable option available to manage the flood risk in Bungay and surrounding area. The group would also support the whole community to be more flood resilient in the future.

We will be holding an initial online meeting via MS Teams, between 5.30pm to 7.30pm on Wednesday 19 January 2022. The creation of the community flood group will require some volunteers to lead and support the group.

If you would like to be part of the community flood group in any kind of capacity and to improve the resilience of the whole community, please contact Tina Starling at <a href="mailto:tina.starling@environment-agency.gov.uk">tina.starling@environment-agency.gov.uk</a> or phone 07500 884454

#### **Flood Warning Service**

To improve the accuracy of the flood warnings in Bungay we are continuing to review the thresholds for our Flood Warning System based on information gathered during the December 2020 event.

We understand that some residents raised concerns the flood alerts and warnings issued during the December 2020 event were received after the flooding occurred from multiple sources. Our flood warning system can only warn for flooding from the River Waveney.

We cannot provide a warning service for surface water flooding as it is extremely difficult to predict precisely where it will happen as it is dependent on a number of factors including topography, geology, rainfall, soil moisture conditions, and the local drainage network.

If you are in immediate danger during a flood call 999 and follow advice from the emergency services to keep yourself and your family safe. For further information on <a href="https://www.whatto.com/whatto.com

#### **Contact for more information**

For further questions or comments please contact:

Nicki China

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# **Frequently Asked Questions**



# **Flood Warnings**

#### How do I know if my property is at flood risk?

You can check if your property is at risk by visiting: <a href="www.gov.uk/check-if-youre-at-risk-of-flooding">www.gov.uk/check-if-youre-at-risk-of-flooding</a>

#### What are flood warnings and how do I sign up for them?

We have a network of both rain gauges and river gauging stations to monitor the height and flow of rivers. If a river level is measured or forecast to reach above a typical range this means that flooding is possible, and a flood warning or alert may be issued.

We provide a warning and informing service through Flood Warnings Direct. Alerts and warnings can be sent to you by text message, phone call or email. Register with our Flood Warnings Direct service by visiting our website: <a href="https://www.gov.uk/sign-up-for-flood-warnings">www.gov.uk/sign-up-for-flood-warnings</a> or call FloodLine on 0345 988 1188.

I am signed up for flood warnings but I was flooded before the warning came through, why? We understand that some residents raised concerns about flood alerts and warnings issued during the December 2020 event were sometimes received after the flooding had begun in some locations. This happened because flooding occurred from multiple sources. The Environment Agency's flood warning system can only warn for flooding from the River Waveney. We cannot provide a warning service for surface water flooding as it is extremely difficult to predict precisely where it will happen as it is dependent on a number of factors including topography, geology, rainfall, soil moisture conditions and the local drainage network.

# Flood incident management

## How did the Environment Agency respond to the flooding?

Due to the Government guidance many of our office-based staff were working from home. This did not affect our ability to respond to incidents and we had plans in place to ensure that we could operate a virtual incident room during a flood event. We have staff rostered on standby 24/7 365 days a year and for the Christmas period had rosters with three times the resilience to a normal week.

Our staff were working around the clock between 23 December 2020 and 4 January 2021. This included checking gauges, clearing trash screens, as well as monitoring river levels and issuing warnings where necessary.

#### Did the operation of the sluices contribute to the flooding last December?

The vast majority of the Environment Agency owned and maintained sluices functioned as expected during the December 2020 flood event. At the time, our Flood Warning Duty Officer was able to confirm that at Ellingham and Wainford, both gates were opening on 23 December 2020 and were fully open from 24 until 28 December 2020. In the aftermath of the flood event, we became aware of a fault with the Bungay Sluice. The transducer which determines the water levels was submerged, resulting in the gates operating independently of the river levels and closing for 16 hours on 24 December.

Our operatives were on the ground every day throughout the flood event, conducting "river runs" to monitor the river, flood plain and sluices. However, access to the riverbanks proved difficult in many places, as the river had overtopped and filled the surrounding flood plain. As a result, we had no early indication that there was a fault with the gate, and only became aware of the problem after the event.

At the point when the gates were closing, the water had already overtopped the banks and was on the flood plains adjacent to the sluice, meaning any flows impeded by the gates closing were minor due to the volumes of water already bypassing this structure. As a result, we believe the gate closure would have had a limited impact further upstream in Ditchingham Dam and the Bridge Street area of Bungay, where we have received reports of internal flooding to properties. We've repaired the transducer and a contingency plan has been implemented to ensure that the gates do not close accidentally during future flood events.



## Reporting

# Who should I report flooding to?

Depending on where the flooding comes from will dictate who needs to be informed and who would deal with that flooding.

Flooding	Authority	Contact details
Surface water, groundwater and ordinary water course	Suffolk County Council	0345 606 6171 www.suffolk.gov.uk/flooding
Main rivers, coastal flooding and reservoirs	Environment Agency	Incident Hotline- 0800 807060
Sewer flooding	Anglian Water	03457 145145 www.anglianwater.co.uk

#### What is a Section 19 report?

Section19 reports are a requirement under the Flood & Water Management Act 2010, that Lead Local Flood Authority (LLFA) will investigate flooding under certain situations, set out in the Suffolk Local Flood Risk Management Strategy. Suffolk County Council, will carry out Section 19 investigation when:

- 1. Where there was a risk to life as a result of flooding
- 2. Where internal flooding of one property (domestic or business) has been experienced on more than one occasion
- 3. Where internal flooding of five properties has been experienced during one single flood incident
- 4. Where a major transport route was closed for more than 10 hours as a result of flooding
- 5. Where critical infrastructure was affected by flooding
- 6. Where there is ambiguity surrounding the source or responsibility of a flood incident.

A Section 19 was not carried out for the flood incident in Bungay, Earsham and Wainford as the source of flood was from the main river Waveney and not ambiguous. A section 19 report was carried out for Ditchingham Dam as Norfolk County Council (LLFA for the area) have different criteria available at <a href="https://www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/flood-investigations">www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/flood-investigations</a>

## **Property Flood Resilience**

#### Why haven't I been offered Property Flood Resilience for my property?

We are currently not offering Property Flood Resilience (PFR) measures to properties that flooded in the Bungay and surrounding area because we are investigating the viability of a community-wide scheme to provide some form of protection against flooding first.

The way that Government funding works for flood protection is that a property can only receive the benefit once, and therefore until we know whether a community-wide solution is possible, we are unable to provide PFR measures. By doing so would weaken the justification, and amount of funding available to deliver any other measures that are found to be cost beneficial. If following our study, it turns out that there aren't any viable, cost beneficial community-wide options, it may be that Property Flood Resilience measures are offered to the properties that flooded last December.

There is of course nothing stopping you installing your own PFR measures, however, please note if you do carry out this work and PFR measures are offered in the future, you will not be retrospectively paid for products already purchased. As soon as we know the best course of action for managing the flood risk in Bungay and the surrounding area, we will arrange a community event.



## Why are other communities being offered Property Flood Resilience?

In other communities where there was flooding of isolated properties from main river sources and where strategic ways of managing the flood risks are unlikely to be cost beneficial, we are developing an area wide PFR project.

This project will investigate the potential for delivery of PFR measures to the properties that flooded in December 2020, and currently includes properties in the communities of Barsham, Brockdish, Eye, Flixton, Hempnall, Lower Tasburgh, Needham, Scole and Waterloo, Stowmarket, Wenhaston, Wetherden, Worthing, Woodton & Wramplingham.

#### **Maintenance**

# What channel maintenance was undertaken in Bungay and the surrounding area prior to the flooding in December 2020?

We have a routine maintenance programme for the main rivers in the River Waveney catchment. In the autumn of 2020, a weed cut by machine was undertaken in Bungay Drains and Chainbridge Beck, and vegetation was cleared by hand from the Bungay Tin River. In addition, a weed cut by boat was undertaken between Ellingham Mill and the A143 road bridge.

# Why has the level of channel maintenance declined across the River Waveney catchment in recent years?

The amount of maintenance works that we can undertake depends on our budget allocation in any given year. Each year, we plan and deliver a programme of maintenance that focuses on activities and locations where there is the greatest flood risk and need for intervention.

We do undertake less maintenance of rural watercourses than in the past. This is because we are required to spend flood risk management funding on works that have a demonstrable benefit in reducing flood risk to people and property (i.e. homes and businesses with a postcode).

All watercourses are regularly inspected, and maintenance works planned according to the level of flood risk to people and property. This means that the maintenance work that we do in the Waveney catchment is targeted where there are properties at a high risk of flooding, and this allows us to spend taxpayer's money where it delivers the greatest benefits in reducing flood risk.

# Would dredging reduce the likelihood and consequences of flooding for residents of Bungay and other communities along the River Waveney?

Dredging as an approach to flood risk management is often mentioned by riparian landowners and residents, particularly those that have lived next to a watercourse for a long time and remember this type of channel maintenance taking place in the 20th century.

First and foremost, it is important to establish the difference between dredging and desilting. The former involves the removal of the consolidated material below the natural level of the bed which deepens the river channel, whilst de-silting removes just the fine, un-consolidated sediment without removing any of the hard bed of the river.

Dredging and desilting can form part of our maintenance programme. We consider each location carefully and undertake this type of maintenance where we know it will make a difference. Understanding where dredging and desilting will – and will not – reduce flood risk is key.

We plan dredging and desilting works where they are technically effective, good value for money, do not significantly increase flood risk for others downstream and are environmentally acceptable. The effectiveness of this type of maintenance varies substantially from river to river and within a particular river so we assess it on a location-by-location basis.





In many locations, including the River Waveney, dredging and desilting do not achieve a sustainable and effective reduction in flood risk because rivers can quickly silt-up again. In addition, works of this nature do not increase the carrying capacity of the channel sufficiently to significantly reduce the height of flood water on the floodplain when the river comes out of its banks. Furthermore, dredging and desilting can increase flood risk further downstream.

As a result, we are actively encouraging communities to not see dredging and desilting as standalone solutions to reducing flood risk and the following blog post <a href="https://environmentagency.blog.gov.uk/2020/02/21/floods-and-dredging/">https://environmentagency.blog.gov.uk/2020/02/21/floods-and-dredging/</a> provides a useful starting point to understand this position.

#### Why did we dredge more in the past?

Historically around the UK, rivers were frequently dredged to improve land drainage and support agricultural production. After the Second World War there was a greater need for food production. Rivers were deepened and widened to drain land and increase flow to create more land for agriculture - often with unintended consequences, such as flooding downstream, or a decrease in flow rate that resulted in deposition and a build-up of even more silt in the channel.

The 1970s to the 1990s brought a change in direction because of an increased understanding of how rivers work and the effect dredging has across the catchment. Funding steered away from land drainage and management, to protecting people and property from flooding, resulting in a decrease in dredging for land management. Today, we focus our work on locations where the risk of flooding, economic loss and risk to life are the greatest.

#### Riparian responsibility

Is the Environment Agency responsible for undertaking channel maintenance on main rivers? Whilst the Environment Agency is the Risk Management Authority responsible for managing flood risk from main rivers and the sea, this does not automatically mean that we have maintenance responsibility.

We only have permissive powers to carry out flood defence works, including maintenance works, but no legal obligations to do so. In addition, these powers only apply where there is a flood risk to people or property (i.e. businesses or houses with a postcode) not outbuildings, gardens or farmland.

The responsibility for maintaining a watercourse lies with the riparian owner. Further information on riparian ownership can be found here: https://www.gov.uk/guidance/owning-a-watercourse.

#### What rights and responsibilities does a riparian landowner have that relate to flood risk?

Riparian landowners have certain responsibilities which include maintaining the bed and banks of the watercourse, and keeping the banks clear of anything that could cause an obstruction and increase flood risk, either on their land or downstream if it is washed away. In addition, they must keep any structures on their land, (such as culverts, trash screens, and weirs) clear of debris, and remove fallen trees and woody debris from the channel where it poses a flood risk to people and property.

Riparian landowners have the right to protect their property from flooding. However, they must accept flood flows through their land, even if these are caused by inadequate capacity downstream. A landowner has no duty in common law to improve the drainage capacity of a watercourse he/she owns.

We would advise riparian owners to contact us for advice and guidance on how best to maintain their section of river to avoid any environmental damage that they could be liable for. In addition, some works such as desilting may require a Flood Risk Activity Permit or an exemption. Further information on the permitting process can be found here: <a href="https://www.gov.uk/guidance/flood-risk-activities-environmental-permits">https://www.gov.uk/guidance/flood-risk-activities-environmental-permits</a>.